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The Demand and Price Situation for Forest Products 1965

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Forest Service
November 1965

THE DEMAND AND PRICE SITUATION FOR FOREST PRODUCTS—1965

by

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(Special acknowledgment is made to Herbert B. Wagner, Producer
Associations Division, Agricultural Stabilization and Conservation Service,
for his contribution of the section on Naval Stores)

Miscellaneous Publication No. 1009 U.S. Department of Agriculture

PREFACE

This report presents information on current trends in demand for and prices of forest products in the United States. Although national trends are dealt with for the most part, some material is given for regions and States.

Statistics of production, imports, exports, consumption, prices, and related series in this report are based on information available at the end of August 1965. The most recent data, therefore, should be considered as general indicators of trends and not as final figures fully comparable with statistics for earlier years.

Information on the long-range outlook for timber products and on the present and prospective timber supply situation is available in a comprehensive new Forest Service appraisal of the timber situation, "Timber Trends in the United States" (Forest Resource Report No. 17). This report can be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

Mention of names of commercial firms does not constitute an endorsement by the U.S. Department of Agriculture, Forest Service

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HIGHLIGHTS

Consumption of industrial roundwood products in 1965 is estimated at 11.7 billion cubic feet—3 percent above that of 1964 and a high in a trend that has been rising fairly steadily in recent years.

The total consumption of roundwood in 1965—industrial roundwood plus fuelwood—is estimated at 12.8 billion cubic feet—a postwar peak but still below the levels attained in the early 1900's when large volumes of fuelwood were being consumed.

Production of timber products from domestic forests in 1965 is estimated at 11.1 billion cubic feet—about 2 percent above 1964 and also a postwar high. Stumpage prices for most species of timber have been moving up since 1963. However, 1965 prices for most species are still below the levels reached in the mid-1950's.

Lumber consumption in 1965 is estimated at 40.4 billion board feet, only slightly above the 40.3 billion board feet used in 1964. Softwood lumber use is expected to total 33.5 billion board feet—0.1 billion board feet below 1964—while hardwood lumber consumption is 0.2 billion board feet above the 1964 level.

Domestic lumber production in 1965 is expected to approximate 36.2 billion board feet, only 0.6 percent above that of 1964 but 4 percent higher than the annual average during the last decade. Production of softwood lumber is estimated at 29.5 billion board feet and hardwood lumber at 6.7 billion board feet. These levels are respectively the same and 3 percent above the 1964 output.

The wholesale price index of lumber (1957–59=100) in July 1965 was 101.2—slightly above the 1964 level of 100.7. Hardwood lumber prices rose steadily during the first 7 months to a July level of 111.0—5.6 points above the 1964 average. Southern pine lumber prices also showed a small rise. The indexes for Douglas-fir and most other softwoods, however, declined by a point or two.

Data for the first half of 1965 indicate that imports of lumber for the year may total 5.0 billion board feet, and exports 0.9 billion board feet. These levels are respectively 0.2 billion and 0.1 billion board feet below the 1964 totals.

Data for the first 7 months of 1965 indicate that about 49.8 million cords of pulpwood will be consumed in U.S. pulpmills in 1965. This amount is the largest ever, exceeding 1964 consumption by 1.5 million cords or 3 percent.

Domestic pulpwood production in 1965 is estimated at 48.7 million cords—3 percent above the 1964 total. Production of round pulpwood is estimated at 37.7 million cords—some 1.6 million cords above that of 1964. Round softwood production is expected to be 27.7 million cords and hardwoods 10.0 million cords. These levels are respectively 5 percent and 2 percent above those of 1964.

Production of pulpwood chips, largely from coarse plant byproducts of sawmills and veneer mills, is expected to be 11 million cords—about 0.2 million cords under the 1964 figure.

Pulpwood prices at local points of delivery have been relatively stable in recent years. In the Midsouth, for example, the price of southern pine roundwood has been around $15.75 per cord since 1956. Prices of hardwood roundwood and chipped plant byproducts have been near $13.10 and $14.40 per cord, respectively, during the same period.

Softwood plywood consumption, including small amounts of veneer, is estimated at 12.1 billion square feet (3/8-inch basis). This is a high in a trend that has been rising at an average annual rate of 9 percent since 1955. Consumption of hardwood plywood is also expected to reach a peak of 4.5 billion square feet, surface measure, in 1965. This is about 11 percent above the 1964 figure, nearly double the level of a decade ago.

Softwood veneer log production in 1965 is estimated at 5.3 billion board feet, local log rule, about 0.3 billion board feet more than in 1964. Softwood veneer log production has been concentrated in the West; however, eight new plants using southern pines have been built in the South, and six plants are under construction. The combined capacity of these 14 plants is estimated at slightly under a billion square feet, 3/8-inch basis.

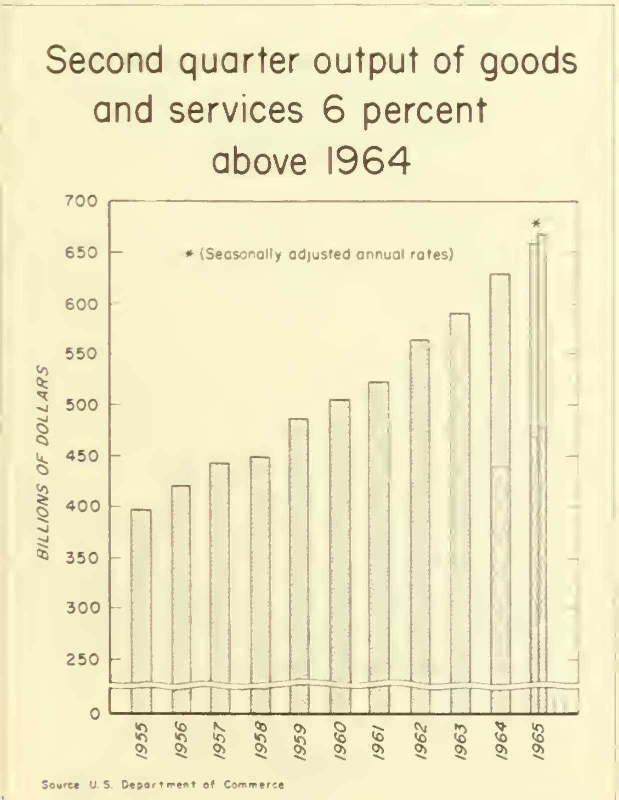
Domestic hardwood veneer log production in 1965 is expected to be 875 million board feet, local log rule. Although this output is 6 percent higher than in 1964, it is not significantly different from the average of the last few years. Imports of hardwood plywood and hardwood veneer are expected to continue to increase in 1965 at about the same rate as in recent years.

Production of miscellaneous industrial roundwood products, such as cooperage logs, poles and piling, fenceposts, and mine timbers, is estimated at 460 million cubic feet in 1965, the same as in 1964. Fuelwood production is expected to be about 1,075 million cubic feet, down somewhat from that of 1964. Christmas tree consumption in 1965 may approximate 46 million trees, and domestic production 34 to 36 million trees.

GENERAL ECONOMIC TRENDS

Second Quarter GNP $37 Billion Above 1964—One of the Sharpest Rises Since World War II

During the first part of 1965, economic activity continued to move upward in the longest sustained peacetime expansion on record. The gross national product reached a seasonally adjusted annual rate of $666 billion in the second quarter of the year, about $9.5 billion above that of the first quarter and $37.2 billion above the level attained in 1964 (*4, 30, 44, 45*)[1] (table 1, fig. 1). The first half gain—one of the sharpest rises since World War II—represented an increase of about 6 percent. This is somewhat above the 5 percent average of the last 5 years but about the same as the 5.9 percent rate of the 1950's.


Second quarter output of goods and services 6 percent above 1964

Source U. S. Department of Commerce

FIGURE 1

Disposable personal income, the source of the money used by consumers for the purchase of homes, furniture, and other products, followed the upward trend in output, reaching a seasonally adjusted rate of $459 billion—about $23 billion above 1964. Most of the major categories of income were higher than in 1964; however, wage and salary disbursements, which compose about two-thirds of all personal income, accounted for most of the growth.

Prices have been edging up since the summer of 1964, causing some of the rise in output and income (*46, 47*). However, price increases have been concentrated in certain groups of commodities—particularly food and nonferrous metals.

Industrial Production 8.8 Percent Above 1964 at Midyear

The growth in output during the first half of 1965 was broadly distributed among the various sectors of the economy. The Federal Reserve Board index of industrial production in July was 143.6 (seasonally adjusted annual rate 1957–59=100)—3.8 percent above the January level and 8.8 percent above the level for 1964 (*5, 6*) (table 1, fig. 2). Production in manufacturing industries rose from 132.9 in 1964 to 145.1 in July. The index of output of furniture and fixtures, an important market for hardwood lumber, veneer, and plywood, was 158.0 in July—about 10.2 percent above output in 1964.

The value of manufacturers' new orders for durable goods in July was $22 billion (seasonally adjusted annual rate)—about $2.2 billion above the level in 1964. For the 17th consecutive month, the backlog of unfilled orders held by such producers moved upward, and in June was about 6 percent above the level at the beginning of the year (*45*).

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[1] Italic numbers in parentheses refer to "Literature Cited," p. 24.

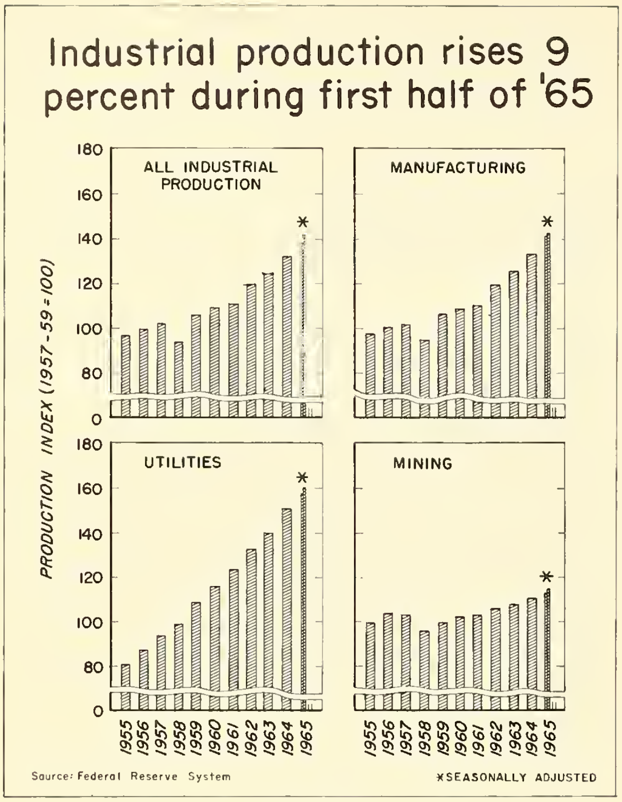


Figure 2

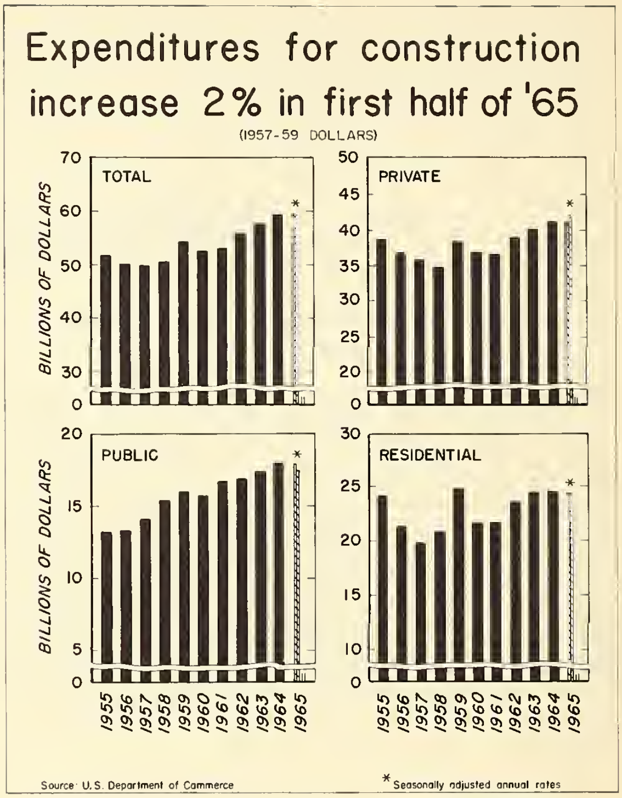


Figure 3

New Construction Expenditures Rose 5 Percent During First Half of 1965

About three-fourths of all the lumber, plywood, and veneer; one-tenth of the paper and board; and all of the poles, piling, and shingles consumed in the United States are used in construction. In July 1965 the seasonally adjusted annual rate of expenditures for new construction was $69.2 billion—5.2 percent above 1964 expenditures (*31*, *42*) (table 1, fig. 3).

Spending for new private nonresidential building—$14.9 billion in July (seasonally adjusted annual rate) or some $1.9 billion above that in 1964—accounted for most of the rise in construction expenditures. The largest increases were for stores, restaurants, garages, and industrial buildings.

Business expenditures on plant and equipment were at a record annual rate of $50.3 billion in the second quarter (*19*). Capital spending plans indicate a further rise to $51.2 billion in the third quarter and $52.9 billion in the fourth quarter. Realization of these levels would mark 4½ years of rising investment.

The seasonally adjusted annual rate of expenditures for public nonresidential construction in July was $19.3 billion—slightly above the $19.1 billion spent in 1964. Expenditures for educational buildings, hospitals and institutional buildings, highways, and conservation and development were all above the 1964 level. Spending for most other types of public buildings and facilities, however, was down. Expenditures for highways, the largest component in public construction (at a seasonally adjusted annual rate of $7.6 billion in June), have been rising steadily in recent years and current Federal and State highway programs indicate further growth.

Some Increase in Residential Construction Expenditures During First Half of 1965 but Number of Starts Declines

Large quantities of lumber, plywood, insulation board, and other timber products are used in the construction of each dwelling unit as indicated in the tabulation below and in table 2 (*27*).

Product	*Unit of measurement*	*Use per house* [1]
Lumber	Board feet	10, 183
Plywood	Square feet (⅜-inch basis).	2, 234
Hardboard	Square feet (⅛-inch basis).	492
Insulation board	Square feet (½-inch basis).	750
Particleboard	Square feet (¾-inch basis).	70

[1] Average per unit use in new single-family detached houses inspected by the Federal Housing Administration in 1962.

In total, residential construction is the Nation's biggest market for lumber, plywood, and insulation board.

Expenditures for residential construction, including new units and repairs, alterations, and additions, totaled $28.3 billion in July 1965 (seasonally adjusted annual rate)—about $1 billion above the 1964 level. Part of the increased expenditures in 1965 is attributable to a rise in the value of dwelling units started. The average cost of new private nonfarm one-family houses started in May was $16,475—some $425 above the 1964 average and more than $3,000 above the 1959 average (*42*).

Housing starts in the first 7 months of 1965 were 4 percent below starts in the same period in 1964 (*32, 42*) (table 1, fig. 4). The indications are that total starts for the year will be above 1.5 million units—somewhat below 1963 and 1964 when starts were near 1.6 million units.

Construction of multifamily units (i.e., buildings for three or more families) rose rapidly in the late 1950's and early 1960's but has shown little change in the past 3 years: construction in 1965 is running at a rate of about 500 thousand units a year, or a third of total starts (fig. 4).

During the first 6 months of 1965, about 40 percent of all housing starts were in the South, 22 percent in the West, 21 percent in the North Central, and 17 percent in the Northeast (*42*). Population growth in these regions between April 1, 1960, and April 1, 1964, was as follows:

	Population growth (thousands)
Northeast	2, 447
North Central	1, 751
South	4, 279
West	3, 534

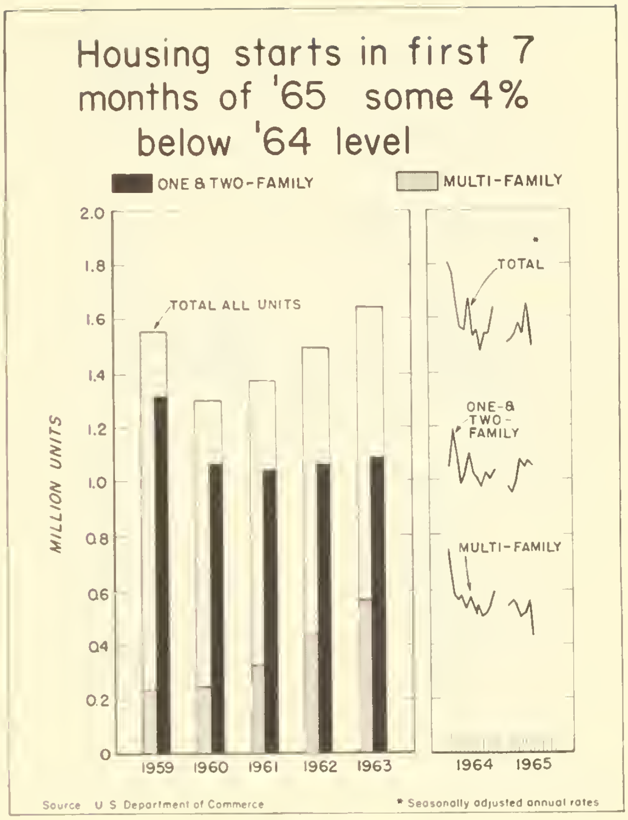


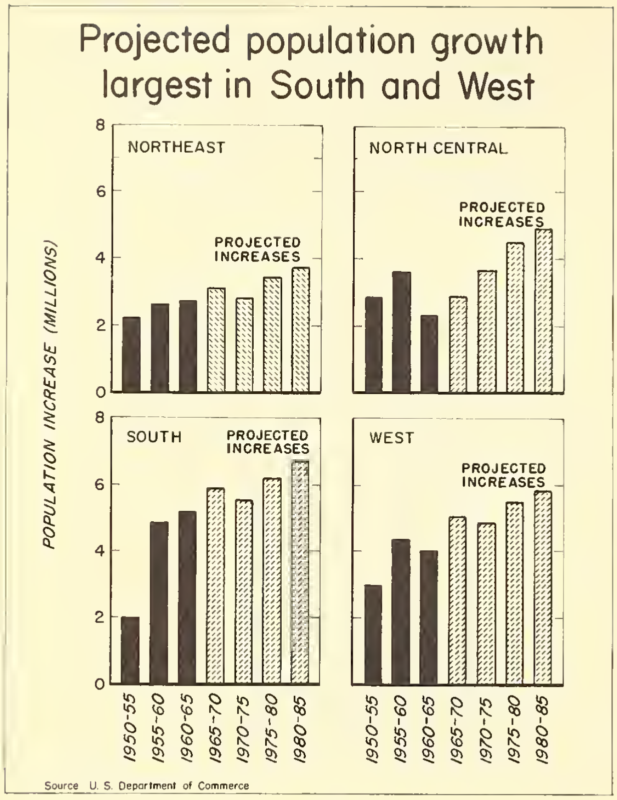
FIGURE 4

Regional population projections indicate that the population in the West and South will continue to grow more rapidly than in other regions (*38*) (fig. 5).

Prospects Good for Continued High Level of Residential Construction in the Short Run—Substantial Increases Expected in Long Run

Several factors favor a continued high level of residential construction in the immediate future, including rapid growth in personal income and population (*39*) and relatively low vacancy rates (*33*). Also a new omnibus housing law promises to stimulate residential construction through (1) rent subsidies to low-income families, (2) increasing the supply of public housing by 60,000 units a year for 4 years, (3) more favorable FHA terms, and (4) new lending powers designed to spur home construction, land purchases and development, and community planning in urban and rural areas.

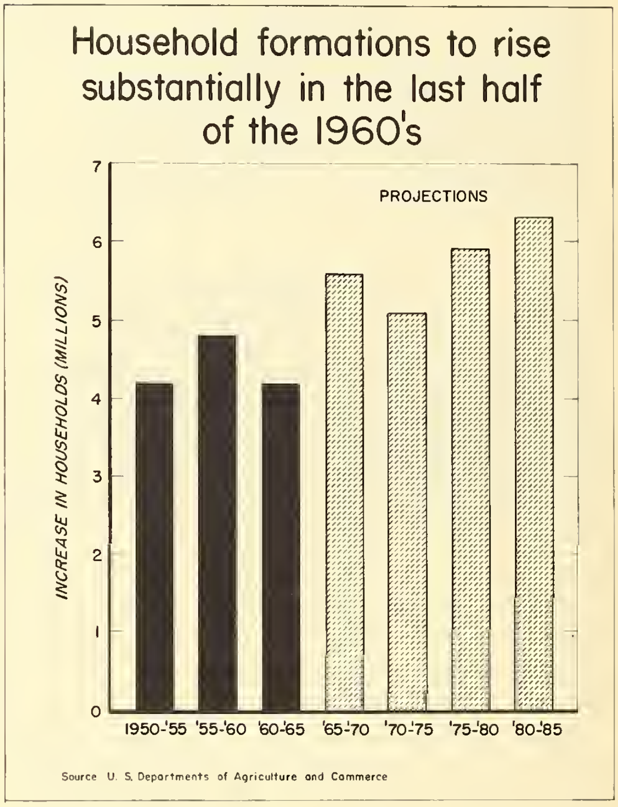
By the late 1960's the upsurge in births that started in the early 1940's is expected to cause an increase in the formation of new households, the basic source of demand for new housing (fig. 6).


Projected population growth largest in South and West

Source U. S. Department of Commerce

Figure 5

Over a longer period, a recent Forest Service appraisal (*25*) indicates that by the early 1980's new household formations may average about 1.3 million a year, compared with less than a million in the 1950's. Replacement of existing units is also likely to increase rapidly in an expanding economy and with the housing programs that are in prospect. Total construction of housing units may thus average about 2.4 million units a year in the 1980–85 period—about 50 percent more than the 1.6 million started in recent years.


Household formations to rise substantially in the last half of the 1960's

Source U. S. Departments of Agriculture and Commerce

Figure 6

TIMBER CONSUMPTION, PRODUCTION, AND IMPORTS

Consumption of Industrial Roundwood Expected To Increase 3 Percent in 1965 and Reach a High of 11.7 Billion Cubic Feet

Consumption of industrial roundwood, i.e., saw logs, veneer logs, pulpwood, and all other products except fuelwood, is expected to show a moderate rise in 1965 to about 11.7 billion cubic feet (table 3, fig. 7). This is about 3 percent above the 1964 level and represents a new high in the consumption of industrial timber products. All of the increase in use in 1965 reflects a rise in the consumption of pulpwood and veneer logs.

Per capita consumption of industrial timber products is expected to remain at about the 1964 level. There will, however, be small increases in per capita use of veneer logs and pulpwood (table 4). Per capita use of most other timber products such as saw logs, poles, piling, cooperage logs, and fenceposts will decline.

The total consumption of roundwood in 1965—industrial wood plus fuelwood—is estimated at 12.8 billion cubic feet. Although this will be a postwar peak, it is still below the levels attained in the early 1900's when large volumes of fuelwood

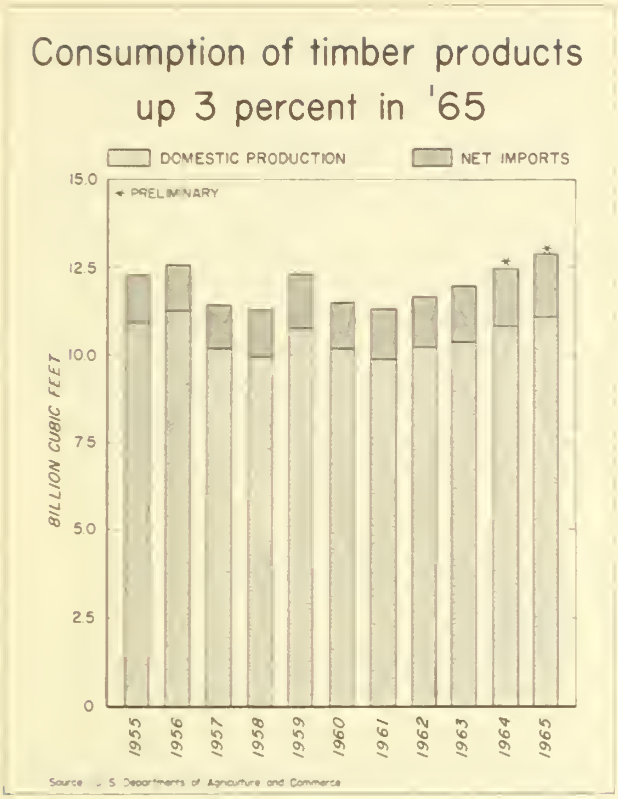


Figure 7

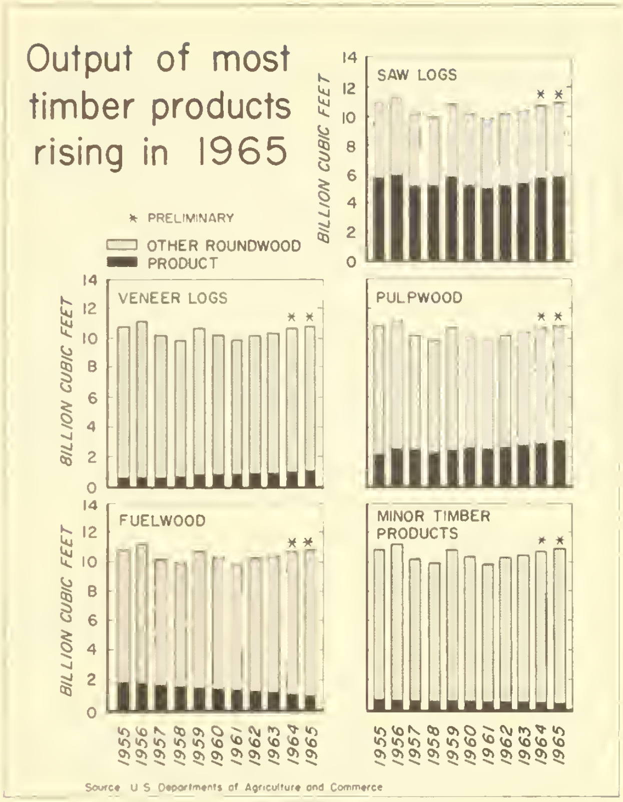


Figure 8

were used for domestic cooking and heating and industrial and agricultural purposes.

Two Percent Rise in Domestic Timber Production Anticipated in 1965

Production of timber products from domestic forests in 1965 is estimated at 11.1 billion cubic feet—about 2 percent above 1964 and a postwar high (table 3, fig. 8). Saw logs are expected to compose about 51 percent of the domestic output; pulpwood 26 percent; veneer logs 9 percent; fuelwood 10 percent; and miscellaneous industrial timber products the remaining 4 percent.

Recent changes in the output of these products from domestic forests are shown in figure 8. During the last decade, production of pulpwood has grown by 33 percent and that of veneer logs by 77 percent. Saw log production has shown considerable fluctuation but no well-defined trend. The output of miscellaneous industrial timber products and fuelwood, on the other hand, has declined.

Production from domestic forests in 1965 is expected to compose about 87 percent of the timber consumed (fig. 9).

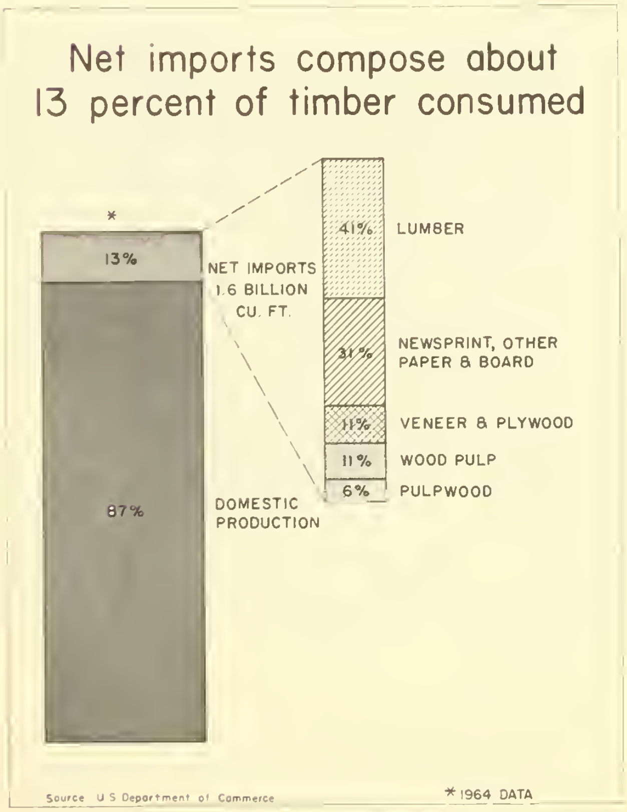


Figure 9

1965 Net Imports Expected To Rise 5 Percent

The remaining 13 percent is to come from imports. Trade reports in the first half of 1965 indicate that total net imports of timber products, including the roundwood equivalent of lumber, plywood, veneer, wood pulp, and paper and board will be about 1.7 billion cubic feet. This would be about 5 percent above the 1964 figure, and a high in a trend that has been rising fairly rapidly in the last two decades.

Lumber composed about 41 percent of the imports in roundwood equivalents; newsprint and other paper and board grades 31 percent; wood pulp 11 percent; and pulpwood 6 percent (fig. 9). Veneer and plywood imports, which have been rapidly increasing in importance in the last decade and a half, would account for the remaining 11 percent.

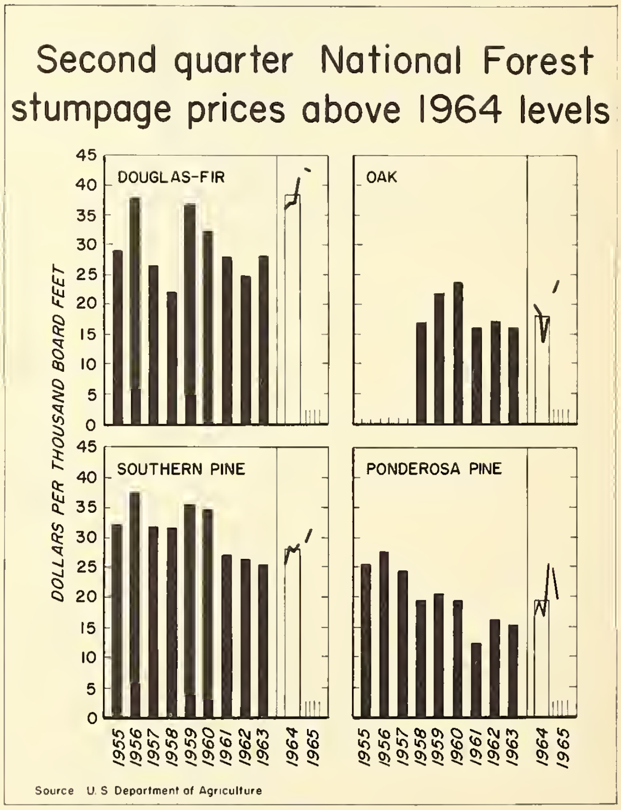
Although the United States is primarily an importer of timber products, it also exports substantial amounts. Log exports from the Pacific Northwest in particular have become important in the last few years (*29*). In 1964, such exports totaled 835 million board feet—about the same as lumber exports from the whole United States. Shipments during the first half of 1965 indicate that log exports from the Pacific Northwest for the year may be somewhat below those of 1964.

STUMPAGE PRICES

Second Quarter Douglas-Fir Stumpage Prices 11 Percent Above 1964 Average—Prices of Most Other Species Also Rising

Stumpage prices for most species of timber sold from the National Forests were moving upward in early 1965 (*24*) (table 5, fig. 10). For example, the average price of Douglas-fir in the second quarter of 1965 was $42.40—11 percent above the average in 1964 and 52 percent above that of 1963. Oak stumpage averaged $23.70 per thousand board feet in the second quarter, about 32 percent above the 1964 average. Southern pine, ponderosa pine, western hemlock, and maple showed a generally similar pattern of change. Despite these recent increases, which have been going on since 1962, stumpage prices for most species are still below the high levels reached in the mid-1950's.

There has been considerable fluctuation in stumpage prices from quarter to quarter and year to year. This fluctuation and the wide variation among species (shown in table 6 and the following tabulation) reflect a variety of factors such as timber quality, amount of competition, and timber accessibility.



Source U. S Department of Agriculture

FIGURE 10

Species	*State*	*Price per thousand board feet*	
Saw log stumpage:			
Black walnut	Illinois (*8*)	$50. 00–	$100. 00
Hickory	do	8. 00–	15. 00
Sycamore	do	10. 00–	20. 00
Southern pine	Louisiana (*9*)	24. 25–	29. 40
Tupelo gum	do	15. 00–	19. 00
Cherry	West Virginia (*51*)	12. 00–	30. 00
Yellow-poplar	do	10. 00–	20. 00
Veneer stumpage:			
Walnut	Ohio (*16*).		
Prime 16–20 inches		250. 00–	800. 00
Prime 21 inches +		400. 00–	1, 000. 00
Cooperage stumpage:			
White oak	Kentucky (*49*)	$30. 00–	$80. 00
Pulpwood stumpage:		*Price per cord*	
Southern pine	Louisiana (*9*)	$3. 50–	$4. 60
Hardwoods	do	1. 40–	1. 50
Spruce and fir	New Hampshire (northern) (*13*)	3. 00–	6. 00
Hardwoods	do	0. 25–	1. 50

The above and other stumpage prices shown in State reports generally represent timber buyers' quotations, and are usually presented as a range of prices per thousand board feet without standardized specifications as to grade or log rule.

THE DEMAND AND PRICE SITUATION FOR LUMBER

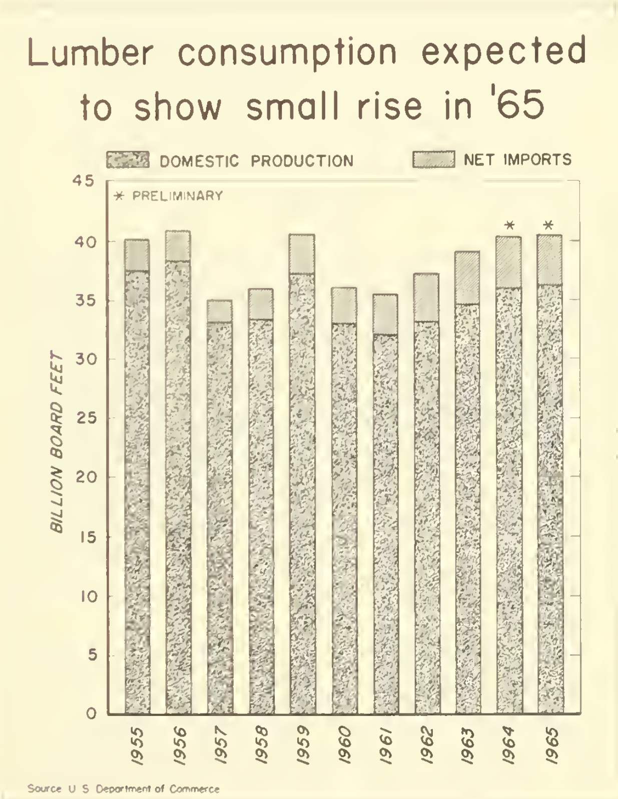
Lumber Consumption in 1965 Estimated at 40.4 Billion Board Feet—Slightly Above 1964

On the basis of trends in production and trade statistics during the first half of the year, it is estimated that lumber consumption in 1965 will be about 40.4 billion board feet (table 7, fig. 11). This is slightly above the 40.3 billion board feet used in 1964, and 6 percent more than the average annual consumption of 38.1 billion board feet over the past decade.

Softwood lumber consumption in 1965 is estimated at 33.5 billion board feet and hardwood lumber at 6.9 billion board feet. In 1964 consumption was estimated at 33.6 and 6.7 billion board feet, respectively.

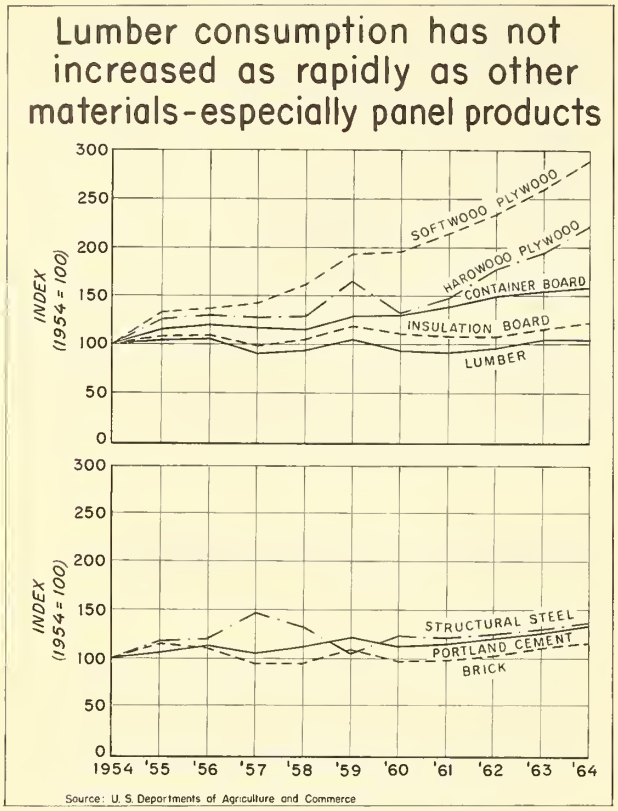
Trends in the consumption of lumber and other materials used in construction, shipping, and manufacturing are illustrated in figure 12 and table 8. In the last decade and a half, lumber use has not increased as rapidly as most other materials, especially softwood plywood and other panel products, because of extensive changes in construction practices, manufacturing methods, and consumer tastes.

In residential construction, for example, average use of lumber per dwelling unit dropped from 10,000 board feet in 1952 to 8,700 board feet in 1962. This in part was caused by the rapid rise in the relative importance of multifamily dwelling units (see fig. 4) which on the average require only about two-fifths as much lumber as single-family units. Growth in the proportion of single-family houses built on concrete slab foundations, where girders, floor joists, and sills are eliminated, was another factor in the decline in average lumber use per dwelling.



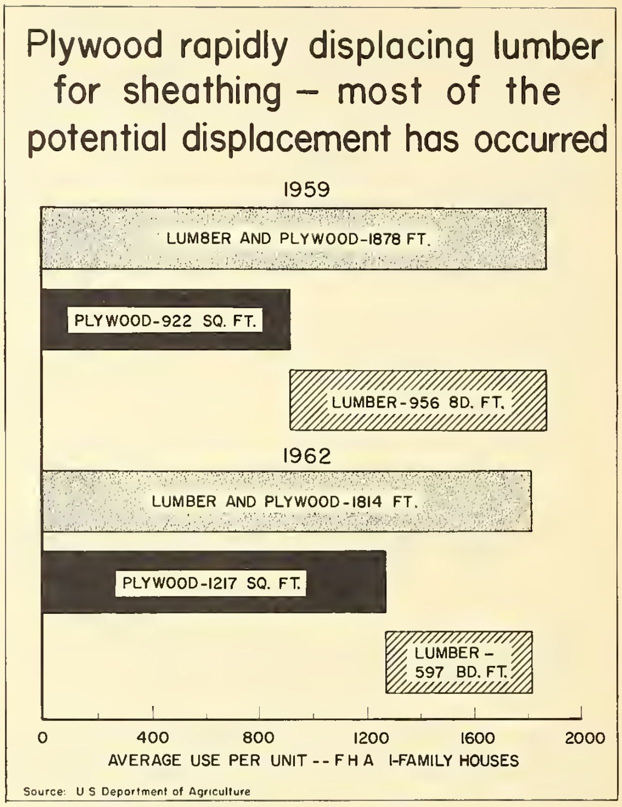
Source U S Department of Commerce

FIGURE 11



Source: U. S. Departments of Agriculture and Commerce

Figure 12



Source: U S Department of Agriculture

Figure 13

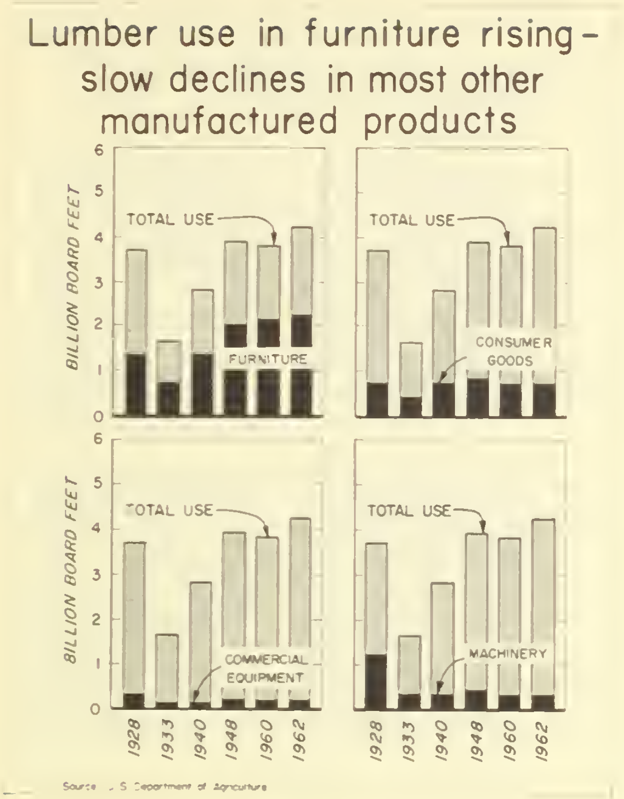
Lumber has also been displaced to some extent by competitive materials, particularly plywood and other wood-panel products. Thus between 1959 and 1962 the volume of lumber used for sheathing in new single-family houses inspected by the Federal Housing Administration declined from 956 board feet to 597 board feet (table 9, fig. 13). Plywood consumption for sheathing, on the other hand, increased from 922 to 1,217 square feet ($3/8$-inch basis) in the same period. Substantial displacement of lumber in subflooring also occurred.

The available data on the use of wood products in house components suggests that much of the feasible displacement of lumber by plywood in sheathing and subflooring has already taken place. Lumber appears to be in a good competitive position in other components such as framing. This, the high level of housing starts which seem in prospect, and the likelihood of an increase in average size of dwelling units as incomes rise, all indicate a strong demand for lumber in residential construction in the future.

Surveys of wood use in manufactured products show little change in the total volume of lumber used in manufacturing, although trends differ in the various industries (*28*) (fig. 14). Between 1948 and 1962, consumption in the manufacture of machinery such as trucks and farm implements fell from about 435 million board feet to 293 million. There were also slow declines in use for consumer goods such as sports equipment and musical instruments; and for commercial equipment such as water-cooling towers, partitions and fixtures, and signs and displays. In contrast, lumber used in household furniture rose from 1,965 million board feet in 1948 to 2,255 million board feet in 1962.

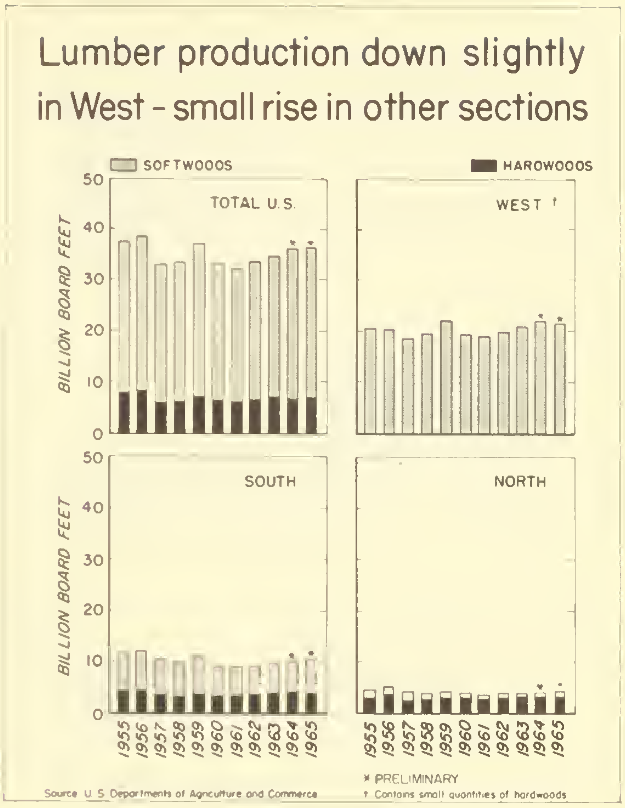
In view of the projected increases in population, households, and incomes which will create new and larger demands for furniture and other products, an upward trend in industrial lumber use seems likely.

These factors are also expected to result in some increase in lumber demand in shipping. This will be a reversal of recent trends. Between 1948 and 1962 lumber used in the manufacture of shipping containers dropped from 5.5 billion board feet to 1.8 billion, while lumber used in pallets rose from 0.2 billion to 1.7 billion board feet.



Source U S Department of Agriculture

FIGURE 14



* PRELIMINARY

† Contains small quantities of hardwoods

Source U S Departments of Agriculture and Commerce

FIGURE 15

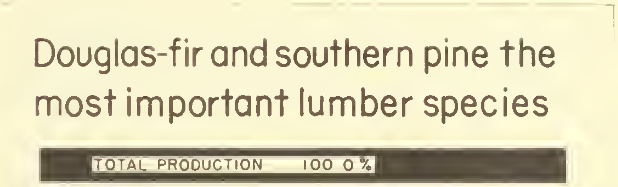
Domestic Lumber Production in 1965 Estimated at 36.2 Billion Board Feet—0.2 Billion Above 1964

Data on production, new orders, and shipments published by lumber manufacturers' associations during the first 8 months of 1965 indicate that domestic lumber production for the year may approximate 36.2 billion board feet (table 10, fig. 15). This would be 0.6 percent above the 1964 figure and 4 percent higher than the annual average for the last decade. Production of softwood lumber is estimated at 29.5 billion board feet—the same as in 1964—and hardwood lumber at 6.7 billion board feet—3 percent above the 1964 total.

Douglas-fir, southern pine, ponderosa pine, western true firs, and hemlock are the chief softwood species (fig. 16). Oak, gum, maple, yellow-popular, and cottonwood are the most important hardwood species.

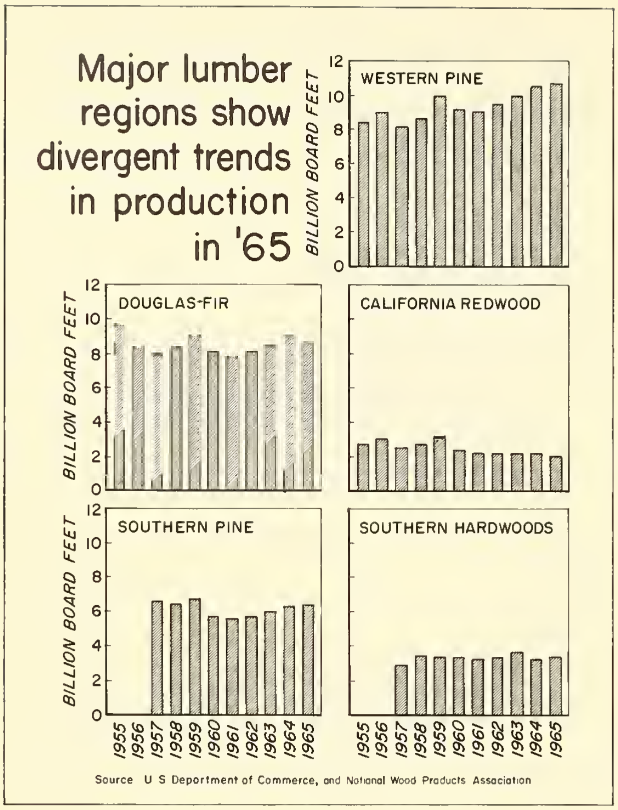
Lumber Production Down in Some Producing Regions—But New Orders Up in All Regions

Lumber production in the major producing regions showed divergent trends during the first



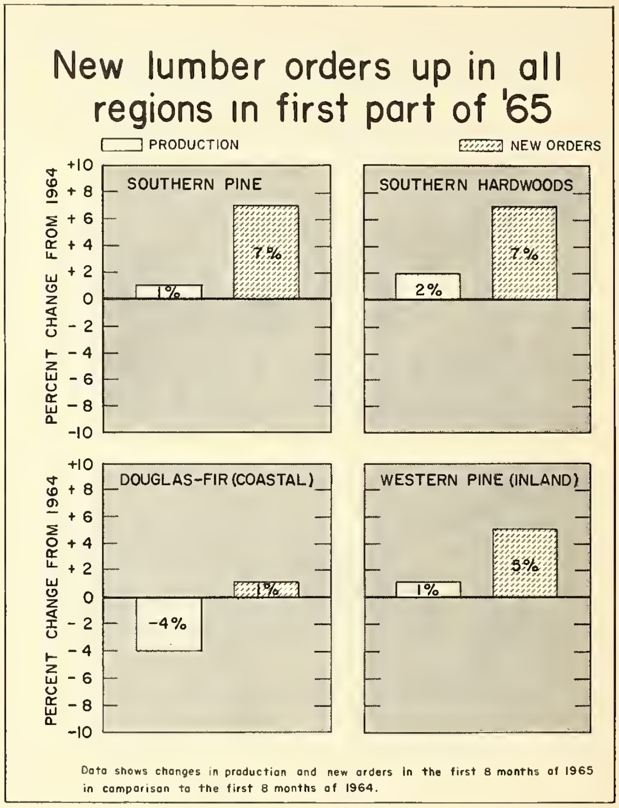
Source U S Department of Commerce

FIGURE 16



Source U S Department of Commerce, and National Wood Products Association

FIGURE 17



Data shows changes in production and new orders in the first 8 months of 1965 in comparison to the first 8 months of 1964.

FIGURE 18

part of 1965 (fig. 17). Estimated southern pine production at the end of the first 8 months was 1 percent above that of 1964 (*21*). The cut of southern hardwoods was about 2 percent above that of 1964 (*20*). Output of white pine, ponderosa pine, sugar pine, and other associated species in the Western Pine region (Inland region)[2] was also running slightly above 1964 levels (*52*, *53*). In contrast, the cut in the Douglas-fir region of western Washington and Oregon (Coast region)[2] at the end of August was 4 percent under the 1964 level (*52*, *53*). As shown in figure 18, new orders were above 1964 levels in all of the major lumber-producing regions.

1965 Lumber Production in the West Estimated at 21.8 Billion Board Feet—Slightly Below 1964

On the basis of data for the first part of 1965, it is estimated that about 21.8 billion board feet of lumber will be produced in the West[3] in 1965 (table 10, fig. 15). This output is slightly under 1964 production, but 7 percent above the annual average during the last decade. Production in the West composes about three-fifths of all the lumber manufactured in the United States.

About 48 percent of the lumber produced in the West in 1965 is expected to come from the Western Pine region, 43 percent from the Douglas-fir region, and 9 percent from the California Redwood region.

Lumber Production Up 3 Percent in the South

Lumber production in the South in 1965 is estimated at 10.3 billion board feet (table 10, fig. 15). This is about 3 percent higher than in 1964, and 13 percent above that of 1961 when lumber production in the region was at a postwar low of 9.1 billion board feet.

Softwood lumber production in the South in 1965 is estimated at 6.5 billion board feet. Although this is far below the highs reached in the early 1900's, it is substantially above the 5.8 billion board feet cut in 1961. The rise is partly attributed to a recent improvement in the pine sawtimber supply situation, particularly in the States west of the Mississippi.

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[2] The names of the regions used by the Western Wood Products Association in its statistical reports.

[3] The West includes 11 western States and South Dakota. The South consists of the 12 most southern States, including Virginia. The North includes the remaining 24 States in the conterminous United States.

Hardwood lumber production in the South is estimated at 3.8 billion board feet in 1965—somewhat above that of 1964 but about the same as the average for the last decade.

Lumber Production in the North Shows Small Increase

Lumber production in the North in 1965 is estimated at 4.1 billion board feet—11 percent above the 1961 postwar low of 3.7 billion board feet and 3 percent above production in 1964 (table 10, fig. 15).

Wholesale Lumber Prices Up a Little From 1964-Level—Most of the Increase for Hardwood Lumber

The wholesale price index of lumber (1957–59=100) in July 1965 was 101.2—slightly above the 1964 level of 100.7 (*47*) (table 11, fig. 19). Hardwood lumber prices rose steadily during the first 7 months to a July level of 111.0—5.6 points above the 1964 average. Southern pine prices showed a small rise, but price indexes for Douglas-fir and most other softwoods declined by a point or two.

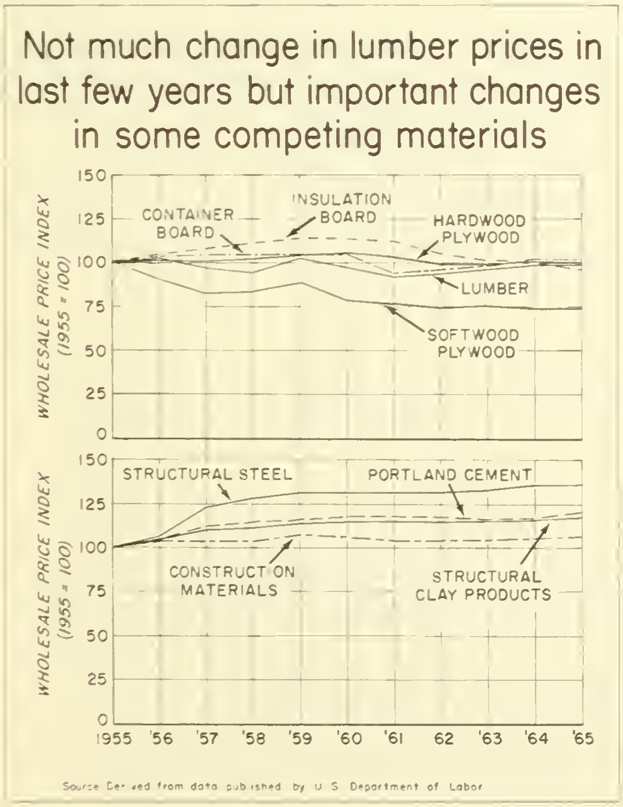


FIGURE 19

Current price levels do not differ significantly from the average for the last decade. In contrast the wholesale price index for softwood plywood has fallen from 117.7 in 1955 to 87.3 in 1962, and to 84.7 in July 1965 (fig. 19). Prices of structural steel and structural clay products increased in this same period. The wholesale price indexes for hardwood plywood, insulation board, and container board, however, have maintained about the same level.

Illustrative saw log prices quoted in several recent reports are shown in the tabulation below:

Species	*State*	*Price per thousand board feet, log scale*
Redwood, camp run unpeeled.	California (Arcata, Eureka area) (*7*).	$65. 00–$70. 00
Southern pine	Louisiana (*9*)	[1] 47. 50– 49. 85
Sweetgum	do	[1] 38. 90– 45. 00
White oak	Missouri (*10*)	[1] 20. 00–110. 00
Yellow birch	New Hampshire (Grafton County) (*13*).	[1] 40. 00– 90. 00
Hard maple	Ohio (*16*)	[2] 40. 00– 99. 00
Walnut	do	[2] 49. 00–172. 00
Alder	Oregon (Lane County) (*17*).	42. 50– 45. 00
Douglas-fir:		
No. 2 old growth	do	55. 00– 60. 00
No. 3 old growth	do	45. 00– 50. 00
Maple	do	40. 00– 42. 50
Beech, good quality.	Kentucky (*49*)	[1] 30. 00– 65. 00
Tulip poplar	do	[1] 45. 00–100. 00
Cedar, grade 2	Washington (western) (*50*).	[1] 32. 50– 47. 50
Hemlock-white fir:		
Grade 2	do	[1] 35. 50– 47. 00
Grade 3	do	[1] 33. 50– 42. 50
Cherry	West Virginia (*51*).	[1] 47. 00–112. 00

[1] F.o.b. mill.

[2] Delivered to buyer.

Lumber Imports Expected To Show 4 Percent Drop in 1965—Exports Also Down

Trade during the first half of 1965 indicates that imports of lumber for the year may total 5.0 billion board feet, and exports 0.9 billion board feet (tables 12 and 13, fig. 20). These volumes are respectively 0.2 billion and 0.1 billion board feet below those of 1964.

Softwood imports, which compose 94 percent of total imports, are estimated at 4.7 billion board feet, 0.2 billion board feet under 1964 imports,

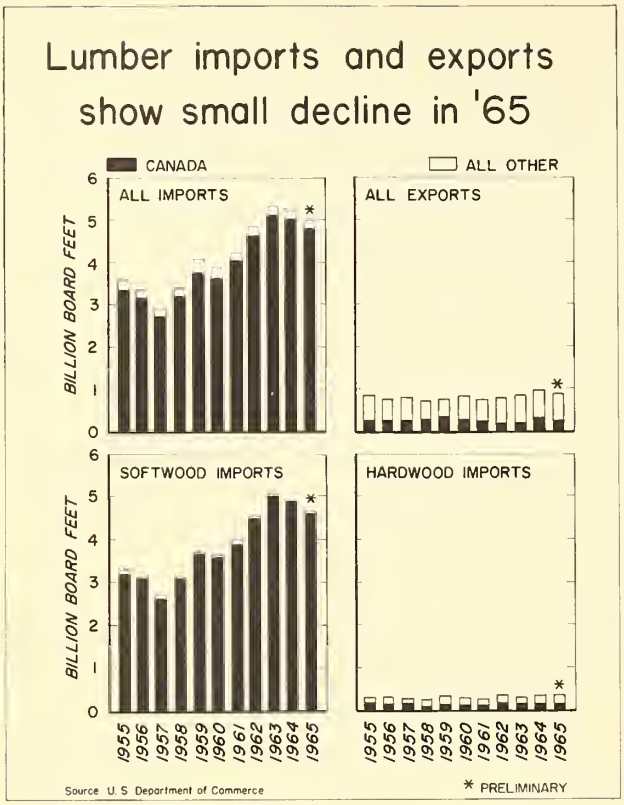


Figure 20

and 0.3 billion board feet under the record imports of 5.0 billion board feet in 1963. Softwood exports are also expected to be slightly under those of 1964. Net softwood lumber imports of 4.0 billion board feet compose about 12 percent of total softwood lumber consumption.

Canada is the source of nearly all softwood lumber imports into the U.S., and of a substantial part of hardwood lumber imports (table 12, fig. 20). Softwood lumber production in Canada in 1963, the latest year for which official statistics are available, was 9.4 billion board feet (table 14). Nearly three-fourths of this total was cut in British Columbia. Hardwood lumber production, all in the eastern Provinces, was 0.5 billion board feet.

According to a recent study prepared by the British Columbia Forest Service (*18*), the lumber industry has expanded into practically all parts of the Province where there are substantial amounts of suitable timber. In these areas the timber resource has been almost completely allocated and the permissible cut fully committed. Since some decline in lumber production is expected in the coastal areas of the Province where industry has long been developed, the study concluded that little or no net increase in lumber production was likely in the developed parts of the Province.

However, there is still an unused annual allowable cut of about 1.1 billion cubic feet in more remote parts of the Province. Timber supply and cost conditions in these areas indicate that primary exploitation will have to be undertaken by the pulp and paper industry. How much increase in lumber production can be economically attained remains to be determined.

Europe is the most important market for U.S. softwood lumber exports, although fairly large volumes, as well as most of the hardwood exports, move to Canada (table 13, fig. 20).

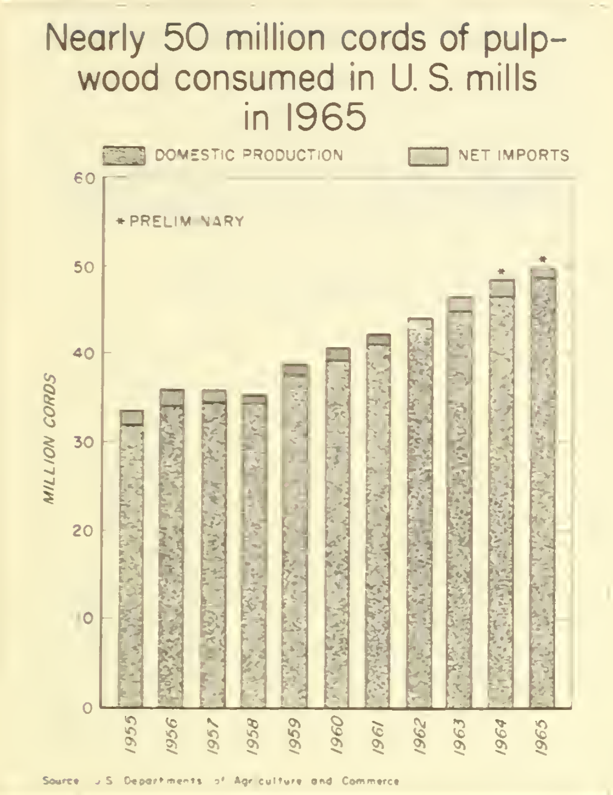
THE DEMAND AND PRICE SITUATION FOR PULPWOOD

1965 Pulpwood Consumption Estimated at 49.8 Million Cords—3 Percent Above 1964

Consumption data for the first 7 months of 1965, as reported by the American Pulpwood Association (*3*), indicate that about 49.8 million cords of pulpwood will be used in U.S. pulpmills in 1965 (table 15, fig. 21). This is a record figure, exceeding 1964 consumption by 1.5 million cords, or 3 percent, and 1963 consumption by 3.4 million cords, or 7 percent.

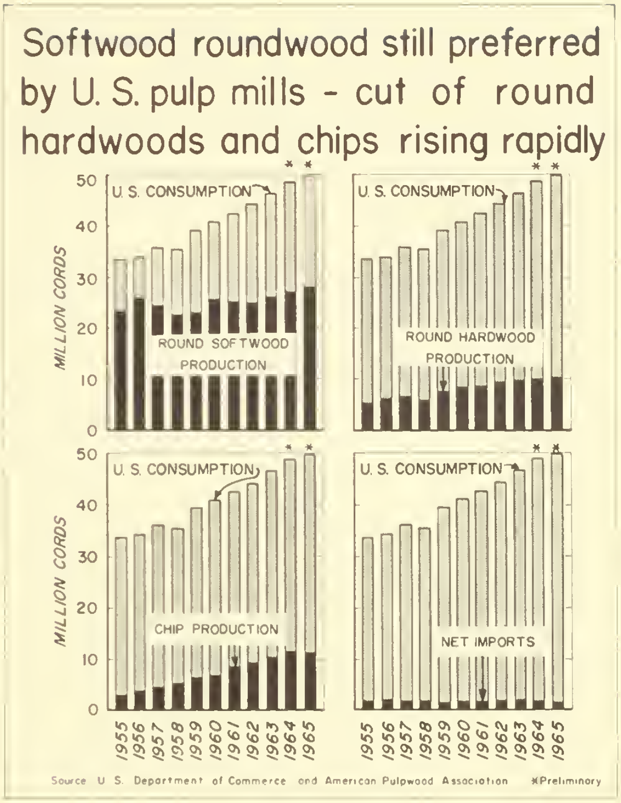
During the last 10 years consumption of pulpwood has increased at an average annual rate of 4.1 percent—or somewhat more than 1.6 million cords a year. In view of the present wave of expansion now underway in the wood pulp industry and the projected increases in population and economic activity, continued rapid growth in pulpwood use is expected.

The present expansion has not been uniformly distributed among the various regions. Thus, there were divergent trends in regional pulpwood


Nearly 50 million cords of pulpwood consumed in U. S. mills in 1965

Source: U. S. Departments of Agriculture and Commerce

Figure 21


Softwood roundwood still preferred by U. S. pulp mills - cut of round hardwoods and chips rising rapidly

Source: U. S. Department of Commerce and American Pulpwood Association *Preliminary

Figure 22

consumption during the first 7 months of the year, as indicated in the tabulation below (*3*):

Region	*First 7 months* *1964*	 *1965*	*Percent 1964 to 1965*
	(Thousand cords)		
North:			
Northeast	2, 736	2, 810	+2. 7
North Central	2, 541	2, 676	+5. 3
Total	5, 277	5, 486	
South:			
South Atlantic	10, 078	10, 351	+2. 7
South Central	6, 565	7, 017	+6. 9
Total	16, 643	17, 368	
West, total	6, 346	6, 330	−0. 3
United States total	28, 266	29, 184	+3. 2

Three Percent Increase Expected in Domestic Pulpwood Production—Total Output To Reach 48.7 Million Cords

About 98 percent of the pulpwood consumed in U.S. mills comes from this country. On the basis of trends in consumption during the first 7 months, domestic pulpwood production in 1965 is estimated at 48.7 million cords—3 percent above the 1964 level (table 15, fig. 22).

Softwood roundwood is expected to compose about 57 percent of the pulpwood produced in 1965 (table 15, fig. 22). Southern pines are the most important softwood species, composing about three-fifths of total output. Spruce, true firs, hemlock, jack pine, and Douglas-fir make up nearly all of the remainder.

Although hardwoods account for only about a fifth of total pulpwood output, production of hardwoods has been rising more rapidly than that of softwoods. Since 1955, for example, output of round hardwood pulpwood has increased at an average annual rate of 6.7 percent—about four times the rate for softwoods (1.7 percent).

Chip production, largely from the plant byproducts of sawmills, veneer mills, and other wood-using industries, has also been rising rapidly in recent years, but data through July (*3*) indicate a small decline in 1965 with output amounting to 11 million cords—about 0.2 million cords below the 1964 total.

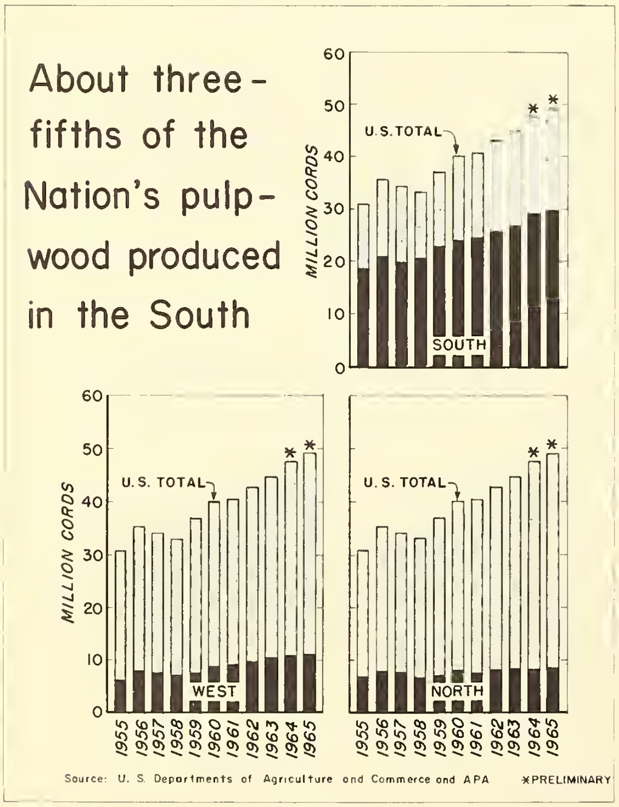
Most of the coarser softwood plant byproducts such as slabs, edgings, and veneer cores that can be considered economically available are now being utilized for chips. There is still a substantial volume of unused coarse hardwood residues in the East. There is also a large volume of sawdust and other fine residues, estimated at about 10 million cords in 1962 (*25*), available for utilization. Recent technological advances in pulping may lead to much greater use of such material in the next few years.

Pulpwood Production in the South Expected To Rise 4 Percent in 1965—Reach a Level of 29.9 Million Cords

On the basis of cumulative data through July (*3*), pulpwood production in the South in 1965 is estimated at 29.9 million cords, 1.1 million cords more than in 1964 and about 60 percent of the total U.S. cut (table 16, fig. 23).

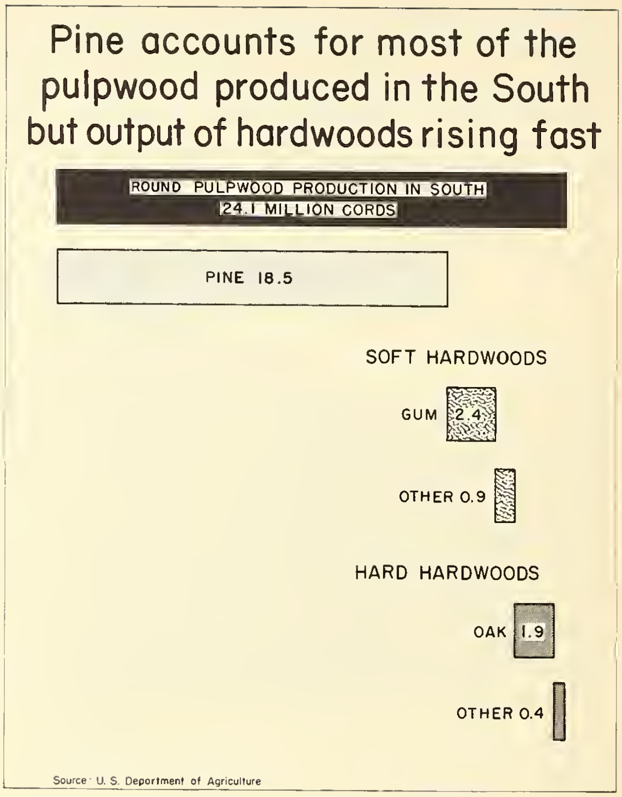
Southern pine roundwood production in 1965 is expected to be about 19.3 million cords—some 4 percent above the 1964 figure.

Production of hardwood roundwood is estimated at 5.7 billion cords, 2 percent above 1964 production and about 2¼ times that of 1955. About three-fifths of the 1964 output was from soft hardwoods, chiefly gum (*23*) (fig. 24). The remaining two-fifths came from hard hardwoods, largely oak.



Source: U. S. Departments of Agriculture and Commerce and APA *PRELIMINARY

FIGURE 23



Source: U. S. Department of Agriculture

FIGURE 24

About half of the hardwood pulpwood produced in 1964 went to sulfate mills. These mills have preferred the soft hardwoods but are increasing the proportion of hard hardwoods in their purchases. Until recently most of the hard hardwoods were used in semichemical mills.

Production data for the first 7 months of 1965 indicate that the output of chips in the South may total 4.9 million cords for the year—another peak in a trend that has been sharply upward. Since 1953, for example, chip production has climbed from 76 thousand cords to the present level—an increase of about sixtyfold. Softwoods are expected to compose about 84 percent of the chip production in the South in 1965, and hardwoods 16 percent.

In the future a growing part of the chips utilized by pulp mills are likely to come from cores of pine, veneer logs, and from chipping plants that bark and chip roundwood at locations away from pulp mills.

1965 Pulpwood Cut in West Estimated at 10.6 Million Cords—1 Percent Above 1964

Pulpwood production in the West in 1965 is estimated at 10.6 million cords, or about 1 percent above the 1964 level (table 16, fig. 23). Chip production from plant byproducts is expected to be about 5.4 million cords and compose 51 percent of the total output. Most of the production of roundwood in the West is from softwoods, but production of hardwood roundwood, largely from alder, is expected to reach approximately 0.4 million cords in 1965.

Pulpwood Output in the North Expected To Rise 3 Percent in 1965 to About 8.2 Million Cords

Pulpwood production in the North in 1965 is estimated at 8.2 million cords, 3 percent above output in 1964 (table 16, fig. 23).

Most of the increase in the pulpwood harvest in the North in the last few years has been in hardwoods. Aspen has been of chief importance but more of the dense hardwoods such as birch, maple, beech, and oak are being utilized. Use of chipped residues since 1954 also has increased from about 59 thousand cords to an estimated 0.7 million cords in 1965, and further growth is indicated.

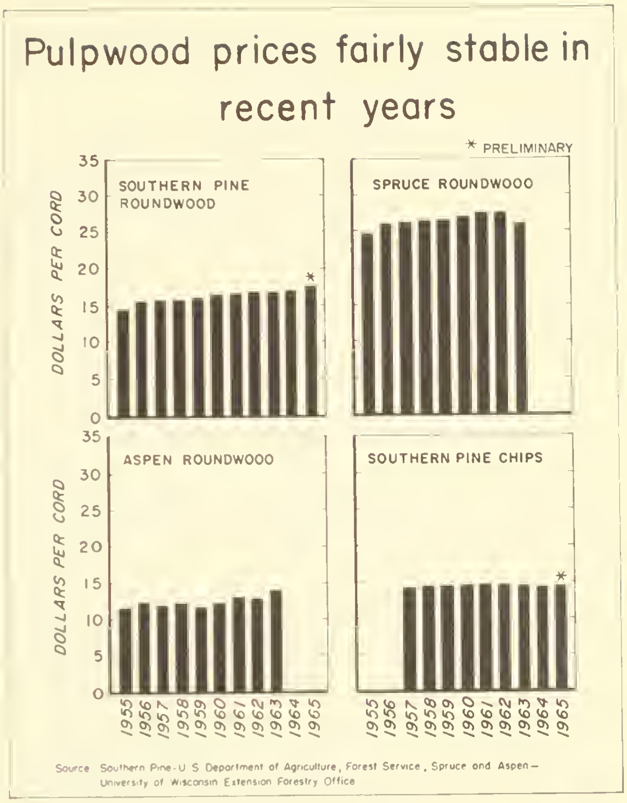
No Significant Change in Pulpwood Prices in Recent Years

Pulpwood prices at local points of delivery have been relatively stable in recent years (table 17, fig. 25). In the Midsouth, for example, the price of southern pine roundwood has been about $15.75 per cord since 1956. Prices of hardwood roundwood have been near $13.10, and of chipped plant byproducts $14.40 per cord during the same period. Pulpwood prices continue to vary considerably by regions and species as illustrated in the tabulation below:

Species	*State*	*Price per rough cord*
Southern pine	Louisiana (*9*)	[1] $15.00–$16.00
Southern hardwood.	do	[1] 13.35– 13.50
Spruce and fir	New Hampshire (northern) (*13*).	[2] 18.00– 24.00
Hardwood	do	[2] 14.00– 19.00
Aspen	Minnesota (*14–a*)	[1] 9.00– 11.00
Balsam fir	do	[1] 14.50– 19.00
Spruce	do	[1] 21.00– 25.00
Cottonwood	Oregon (Multnomah and Clackamas counties) (*17*).	18.00
Douglas-fir	do	17.00– 18.00
Alder	Washington (*50*)	[2] 14.00– 16.50

[1] F.o.b. car.

[2] Delivered at mill.



Source Southern Pine-U S Department of Agriculture, Forest Service, Spruce and Aspen—University of Wisconsin Extension Forestry Office

FIGURE 25

Pulpwood Imports Expected To Drop About 20 Percent in 1965—But Imports of Wood Pulp, Paper, and Board Up

Imports of pulpwood during the first 7 months indicated that the total for 1965 will be about 1.2 million cords—some 20 percent below that for 1964 and a million and a half cords under the peak attained a decade or so ago (*3*). Exports are not expected to be much in excess of 0.1 million cords. Net imports are thus estimated at 1.1 million cords (table 15). This represents about 2 percent of pulpwood consumption in U.S. mills.

Most of the pulpwood trade is along the border between the United States and Canada. Recently, however, there have been some imports from the Bahamas, totaling 192,000 cords in 1964.

The United States also carries on an extensive trade in wood pulp, paper, and board. The extent of this trade in 1964 is shown in the tabulation below (*1*):

Item	*Imports*			*Exports*		
	Total	*Canada*	*Other*	*Total*	*Canada*	*Other*
	[Thousand tons]					
Wood pulp	2, 942	2, 701	241	1, 580	61	1, 519
Paper:						
Newsprint	5, 955	5, 693	262	117	2	115
Other	160	86	74	306	44	262
Total	6, 115	5, 779	336	423	46	377
Board:						
Container board	8	--------	8	872	31	841
Other	12	6	6	162	42	120
Total	20	6	14	1, 034	73	961
Construction paper and board	221	57	164	39	16	23
Total, all grades of paper and board	6, 356	5, 842	514	1, 496	135	1, 361

During the first 5 months of 1965 imports of woodpulp were up 6.1 percent, and paper and board items, chiefly newsprint, were up 7.2 percent over the corresponding period in 1964 (*1, 14, 48*). Total exports of paper and board were also up by about 3 percent, although exports of container board, the most important export grade, and of wood pulp were below early 1964 levels.

By far the largest part of U.S. imports of wood, paper, and board are from Canada. Some U.S. exports go to Canada, although most move to western Europe and Japan.

On the basis of trade data in the early months, it is estimated that the pulpwood equivalent of the net imports of wood pulp, paper, and board in 1965 will amount to about 9.8 million cords. When this is added to the volume of wood used in U.S. mills (estimated at 49.8 million cords), it appears that pulpwood consumption in 1965 will be about 5 percent above that of 1964—a total of 59.6 million cords (table 15). This is the volume of wood needed to meet the Nation's demand for paper, board, and nonpaper products such as rayon and cellophane made from wood pulp.

THE DEMAND AND PRICE SITUATION FOR PLYWOOD AND VENEER LOGS

1965 Softwood Plywood Consumption Estimated at 12.1 Billion Square Feet—6 Percent Above 1964

Data for the first part of 1965 (*2*) indicate that softwood plywood consumption, including small amounts of veneer, will amount to about 12.1 billion square feet (⅜-inch basis), some 6 percent above 1964 (table 8, fig. 12). Although this is a new high, the rate of increase is significantly lower than the average annual rate of 9 percent which prevailed in the 1954–64 period. Per capita use also climbed rapidly in this period averaging 7 percent per year.

A large part of the rise in the consumption of softwood plywood has been attributable to substitution for lumber, particularly in sheathing and subflooring in residential construction and in formwork in nonresidential construction. Data obtained from recent studies of wood products consumption indicate that most of the potential substitution has taken place. This suggests that the high rates of increase in consumption that have held for the last decade or so are likely to slacken off in the next few years, especially in per capita use. Total use of softwood plywood is expected to continue to rise but more in line with increases in construction and manufacturing.

Hardwood plywood consumption in 1965 is estimated at 4.5 billion square feet, surface measure (table 8, fig. 12). This is about 11 percent above that for 1964 and nearly double the level of a decade ago. Per capita use in this period has increased from 14 square feet to 23 square feet. Recent projections developed by the Forest Service show a continued increase in the use of hardwood plywood (*25*). This is based in part on the expectation that the rapid growth in per capita income, which seems in prospect, will result in a rising demand for hardwood plywood in fine furniture, paneling, and other related uses.

Plywood Prices in July Slightly Below 1964 Levels

The wholesale price index of softwood plywood in July was 84.7 (1957–59=100), about 2.0 points below that of 1964 (table 11, fig. 19). This decline continued a downward movement that began in 1950. There has also been a decline in softwood plywood prices relative to competing materials such as lumber and container board. Part of the very fast rise in the use of softwood plywood (including the substitution for lumber), which occurred in the 1950's and early 1960's, can be traced to these price changes.

The wholesale price index of hardwood plywood in July was 98.2 (1957–59=100), some 0.3 points below the 1964 level but slightly above the 1962 and 1963 level (table 11, fig. 19). Although some fluctuation has occurred, there has been little change in the wholesale price of hardwood plywood in recent years. In relation to competing materials, however, prices have shown a gradual decline.

Softwood Veneer Log Production Expected To Be 5.3 Billion Board Feet in 1965—6 Percent above 1964

Nearly all of the softwood plywood and veneer used in the United States is made from domestic logs. On the basis of expected increases in softwood plywood and veneer consumption, it is estimated that softwood veneer log production in 1965 will be about 5.3 billion board feet (table 18, fig. 26). This is about half a billion board feet above that of 1964, and some 2¼ times the output of 10 years ago.

Douglas-fir made up about four-fifths of all the logs used in the manufacture of softwood plywood and veneer in 1964. An increasing variety of other softwoods are being utilized, however, including western hemlock, western pines, larch, true firs, redwood, cedar, and southern pines.

The use of southern pines for plywood has been increasingly significant since 1964, when the first southern plant started production. Expansion has been rapid, and there are now 14 plants with a combined annual capacity of almost 1 billion square feet operating or under construction, as shown in following table:

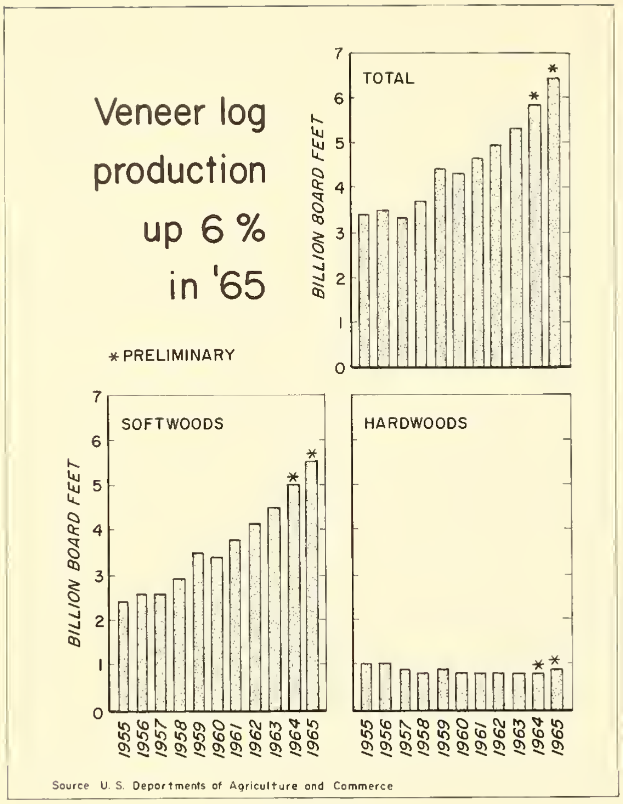
Name	*Location*	*Estimated annual capacity (million sq. ft., ⅜-inch basis)*
Operating:		
Angelina Plywood Co.	Keltys, Tex.	30
Georgia-Pacific Corp.	Crossett, Ark.	130
Georgia-Pacific Corp.	Fordyce, Ark.	120
Kirby Lumber Corp.	Silsbee, Tex.	36
Southern Pine Plywood Co.	Diboll, Tex.	80
Van-Ply Corp.	Oakdale, La.	100
Van-Ply Corp.	Florien, La.	100
Weyerhaeuser Co.	Plymouth, N.C.	72
Total		668
Under construction:		
A. DeWeese Lumber Co.	Philadelphia, Miss.	30
Olin Industries, Inc.	Winnfield, La.	60
Santram-Southern Co.	Ruston, La.	55
Scotch Lumber Co.	Fulton, Ala.	45
U.S. Plywood Corp.	Holden, La.	80
Weyerhaeuser Co.	Jacksonville, N.C.	60
Total		330

Conditions appear to be favorable for further growth in the southern softwood plywood industry. Sufficient southern pine sawtimber is available to support new plants, and freight costs from the southern States to major eastern consuming centers are lower than from western softwood plywood plants.

Hardwood Plywood and Veneer Imports Continue Recent Increases

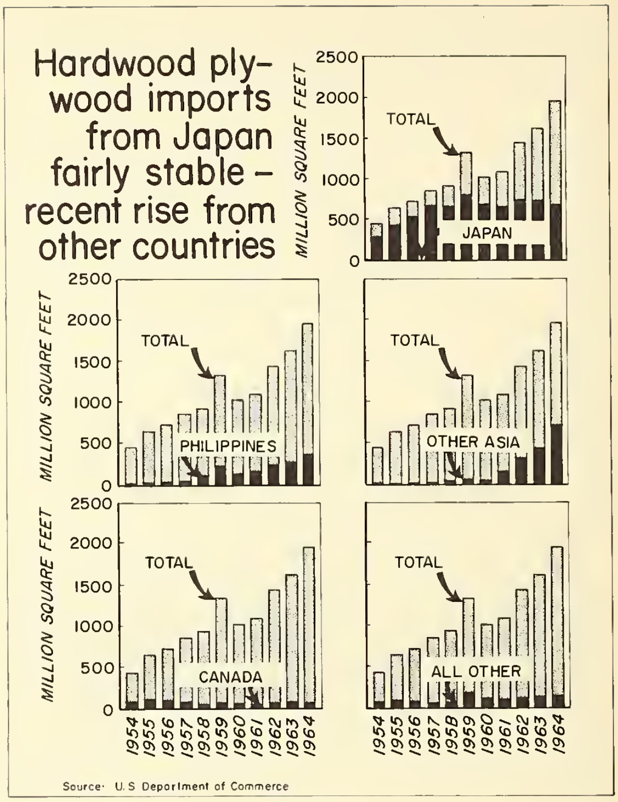
U.S. imports of hardwood plywood and hardwood veneer in 1964 were, respectively, 1.9 billion square feet and 1.7 billion square feet, surface measure (tables 19 and 20). These are peaks in trends that have been markedly upward in the last decade and a half.

Most of the increase in hardwood plywood imports has been composed of luans and other tropical hardwoods, although imports of birch and maple plywood have also shown substantial gains. Until 1957 nearly all of the growth in hardwood plywood imports came from Japan (table 21). Since then, however, imports from Japan have leveled off at around 700 million square feet a year,



Source U. S. Departments of Agriculture and Commerce

Figure 26



Source: U.S. Department of Commerce

Figure 27

and most of the recent increases have originated in the Philippines, Taiwan, and Korea.

Birch and maple compose about two-fifths of the hardwood veneer imports, and tropical species most of the remainder (table 20). Canada was for a long time the most important source of hardwood veneer imports, supplying nearly all of the birch and maple (table 22). Since the late 1950's imports from other areas, particularly the Philippines and Africa, have grown rapidly and these areas now supply three-fifths of the total imports.

U.S. exports of hardwood plywood have not been significant—averaging a little over 2 million square feet, surface measure, in recent years. Hardwood veneer exports have also been relatively small—averaging a little over 50 million square feet a year in the 1950's and early 1960's. In 1964, however, exports rose sharply to a level of 144 million square feet.

Hardwood Veneer Log Production Expected To Rise 6 Percent in 1965

Imports have met most of the recent increases in U.S. demand for hardwood plywood and veneer. However, with the recent rapid rise in domestic hardwood plywood production it is estimated that the U.S. veneer log cut will increase by about 6 percent in 1965 to a level of about 875 million board feet, local log rule (table 18, fig. 27).

In 1963, the latest year for which data are available, sweetgum was the most important domestic hardwood veneer log species, composing 25 percent of the cut (*26*). Other important species, in terms of volume, were tupelo and blackgum, yellow-poplar, oak, birch, and maple. The cut of black walnut, the most highly prized veneer log species in the United States today, was only two percent of total veneer log production in that year.

The forests of the Southeast were the source of nearly half of the hardwood veneer logs produced in 1963. About a quarter of the total was cut in the Midsouth. The remaining production came from the Northeast and Lake and Central regions. Although these northern forests produced comparatively little, they were the primary source of many high-value species such as yellow birch, black cherry, hard maple, and black walnut.

Fairly Large Volumes of Hardwood Sawtimber but Serious Limitations as to Species, Size, and Quality

The level of hardwood plywood and veneer imports suggests that the domestic hardwood plywood and veneer industry is having difficulty in obtaining veneer logs of the kind and quality needed. However, forest survey statistics indicate that the total volume of hardwood sawtimber is fairly large, about 430 billion board feet in 1962 (fig. 28). This volume included numerous hardwood species, many of which have little present or potential value as veneer logs.

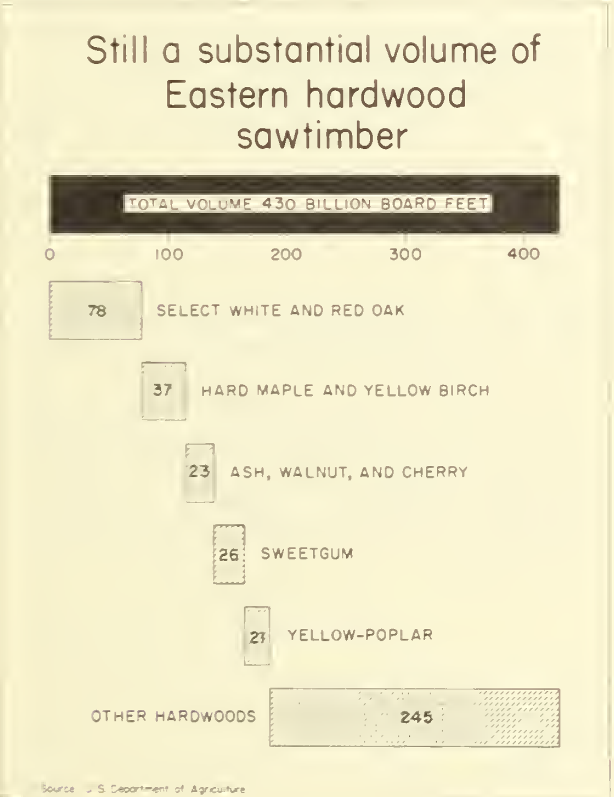


FIGURE 28

However, about 186 billion board feet, or 45 percent of the total volume, was in preferred veneer log species. This included 78 billion board feet of select white and red oaks;[4] 37 billion board feet of hard maple and yellow birch; 23 billion board feet of ash, walnut, and black cherry; 21 billion board feet of yellow-poplar; and 26 billion board feet of sweetgum. Most of this timber is not suitable for veneer logs, primarily because of small size and low grade. Some of it is in trees too widely scattered in the forests to be harvested economically. Part of it is also in private woodlands that are held for recreation or other purposes which are not compatible with timber harvesting.

Wide Variation in Veneer Log Prices

Veneer log prices vary widely depending upon species, quality, and market conditions. Illustrative prices taken from recent forest product price reports published by various States are shown below:

Species	*State*	*Price per thousand board feet*
Walnut	Illinois (*8*)	[1] $300. 00–$550. 00
Bottomland hardwoods.	do	[2] 65. 00– 75. 00
Douglas-fir:		
No. 1 peelers	Oregon (Lane County) (*17*).	100. 00– 105. 00
No. 2 peelers	do	85. 00– 90. 00
No. 3 peelers	do	75. 00– 80. 00
Peelable mill logs.	do	55. 00– 60. 00
Douglas-fir, grade 1 logs.	Washington (*50*)	[3] 107. 50– 110. 00
Hemlock	do	[3] 55. 00– 65. 00

[1] Face veneer quality logs, f.o.b. mill.
[2] Container veneer quality logs, f.o.b. mill.
[3] Delivered at mill.

THE DEMAND AND PRICE SITUATION FOR MISCELLANEOUS TIMBER PRODUCTS

Output of Miscellaneous Industrial Timber Products Stable

The production of miscellaneous industrial roundwood products, i.e., cooperage logs, poles and piling, fence posts, mine timbers, and an assortment of other products such as hewn ties, box bolts, excelsior bolts, turnery bolts, shingle bolts, charcoal wood, and farm poles is expected to be approximately 460 million cubic feet in 1965 (table 3). This is the same as 1964 production and represents about 4 percent of all roundwood produced.

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[4] Select white oaks include *Q. alba*, *Q. michauxii*, *Q. muehlenbergii*, *Q. durandii*, *Q. bicolor*, and *Q. macrocarpa*. Select red oaks include *Q. rubra*, *Q. falcata* var. *pagodaefolia*, and *Q. shumardii*.

The relative importance of each of the miscellaneous industrial products in terms of output from roundwood is shown below for 1952 and 1962—the latest years for which data by product are available.

Product	*Standard unit of measure*	*Output from roundwood*	
		1952	*1962*
Cooperage	Million board feet	355.3	283.0
Piling	Million linear feet	41.2	41.5
Poles	Million pieces	6.5	6.7
Posts	do	306.0	168.7
Mine timbers	Million cubic feet	81.0	48.4
Other industrial products.	do	235.2	157.6
All miscellaneous products.	do	698.8	465.4

Total output of these miscellaneous products declined about a third between 1952 and 1962. Individual products, however, showed divergent trends.

Fuelwood Production Continues Slow Decline

Round fuelwood production in 1965 is estimated at 1,075 million cubic feet—somewhat below the 1,090 million cubic feet produced in 1964. Fuelwood consumption dropped sharply in the first five decades of the present century because of the substitution of oil, gas, coal, and electricity in home cooking and heating and industrial uses. However, in recent years substantial markets have developed in metropolitan areas for fireplace wood, and the expected increases in income, population, and residential construction indicate these markets are likely to continue to grow.

Christmas Tree Consumption May Reach 46 Million in 1965

Consumption of Christmas trees in 1965 is expected to be about 46 million trees. Recent annual imports from Canada have usually ranged between 10 and 12 million trees. This indicated that the demand for Christmas trees from domestic forests and plantations will be from 34 to 36 million trees.

Prices paid for Christmas trees on the stump vary widely, but generally range from about $0.25 for wild trees to $2.50 or more for plantation-grown trees. It is estimated that about half the trees reaching the market in 1965 will be plantation trees.

Scattered Price Information Available for Miscellaneous Timber Products

Some scattered price information is available for a number of miscellaneous industrial timber products in States where their production is important. Illustrative recent price quotations for selected products and species are as follows:

Product	*State*	*Unit of measure*	*Price*
Charcoal wood, unpeeled hardwood	Ohio (*16*)	Ton	[1] $3.00–$3.50
Cooperage (white oak):			
Heading bolts	Illinois (*8*)	Cord foot	[2] .40– .70
Stave bolts	do	do	[2] .65– 1.00
Heading bolts	Missouri (*10*)	do	[2] .35– 1.00
Stave bolts	do	do	[2] .35– 2.00
Fence posts:			
Cedar	Kentucky (*49*)	Each	[1] .30– .85
Locust	do	do	[1] .30– .85
Mine timbers:			
Oak	West Virginia (*51*)	M bd. ft	[2] 30.00
Poles:			
Southern pine	Louisiana (*9*)	30-ft. poles	[3] 2.45– 3.30
		50-ft. poles	[3] 12.50–16.65
		70-ft. poles	[3] 48.00–53.25
Douglas-fir	Washington (*50*)	60-ft. poles	[2] 24.00
		90-ft. poles	[2] 49.50–54.00

[1] Delivered at local points.

[2] F.o.b. mill.

[3] F.o.b. right of way.

THE DEMAND AND PRICE SITUATION FOR NAVAL STORES

The two primary processed derivatives shared by all three major sources of naval stores are rosin and turpentine. Domestic rosin production in the 1965 crop year ending next March 31 continues in excess of requirements for the 6th consecutive year. The reverse has been true for turpentine for 4 consecutive years. Notwithstanding the relatively strong market position of turpentine, rosin remains the most important naval stores product. As rosin goes, so goes naval stores. The market value of domestic rosin output is estimated currently to be five times that of turpentine.

It is expected that domestic production and requirements will approach alinement during the crop year beginning April 1, 1966.

Domestic Production Higher

Domestic production of all types of rosin in 1965 is expected to increase about 4 percent over the 1964 level, to about 2.1 million drums—close to a record high. A 3 percent increase is expected in turpentine production, to about 0.7 million barrels, the highest since 1950 (table 23).

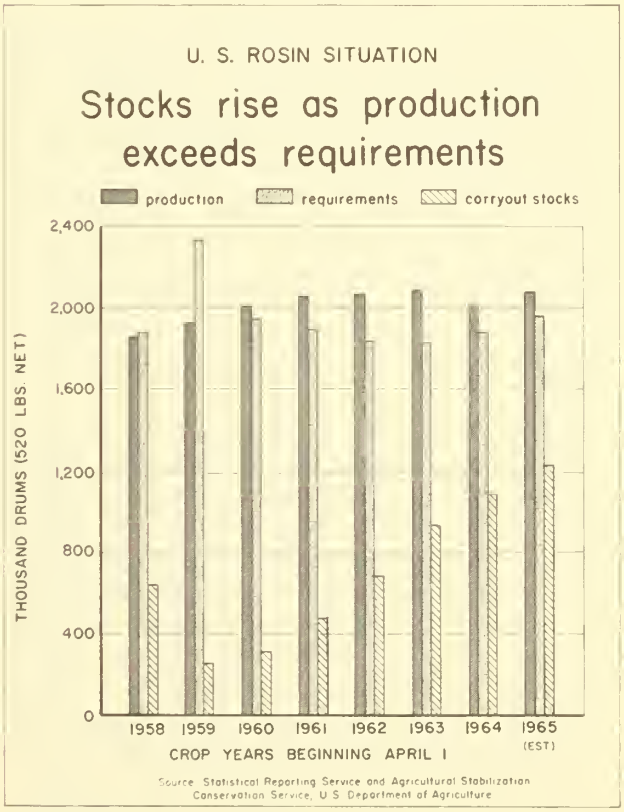
Increases in sulfate and steam distilled (SD) naval stores production should more than offset lower gum rosin output. During 1965 rosin production is expected to divide percentagewise about 18, 61, 21 among gum, SD, and sulfate sources. The corresponding proportion of turpentine output is 16, 24, and 60.

Gum naval stores production costs vary widely. At current and prospective price levels for the next few years, output is likely to decline steadily unless intensive research being conducted by USDA leads to significant production cost breakthroughs.

The increase in SD wood naval stores production during the 1965 crop year is considered temporary. Production is expected to decline in the next several years as stump supplies are depleted. Moreover, continued expansion of tall oil rosin is expected to influence SD producers, many of whom also produce tall oil rosin, to curtail SD output. During the past 5 years, production of tall oil rosin and sulfate turpentine has been increasing at annual rates of 8 and 5 percent, respectively. It is anticipated that production will continue to increase at or near these rates.

Rosin Requirements Increasing

Both domestic use and exports of rosin are expected to increase in 1965 to the highest level since 1960 (fig. 29). Utilization of rosin is increasing gradually throughout the world. Rosin is modified in many ways and sold for hundreds of uses. Nevertheless, there are only five major markets—paper, adhesives, rubber, protective coatings, and printing inks. About 40 percent of U.S. usage is in sizing paper. The shift to and more efficient utilization of fortified rosin size has about run its course in the United States. Henceforth, the correlation between volume of paper and board production and usage of rosin size may be as close as in the 1950's. Rubber and adhesives are estimated to account for more than one-fourth of domestic utilization. Continued growth is expected in this market, with rosin reportedly utilized even in synthetic stereo rubber. Nearly 15 percent of domestic rosin disappearance goes into printing inks and protective



Source Statistical Reporting Service and Agricultural Stabilization Conservation Service, U S Department of Agriculture

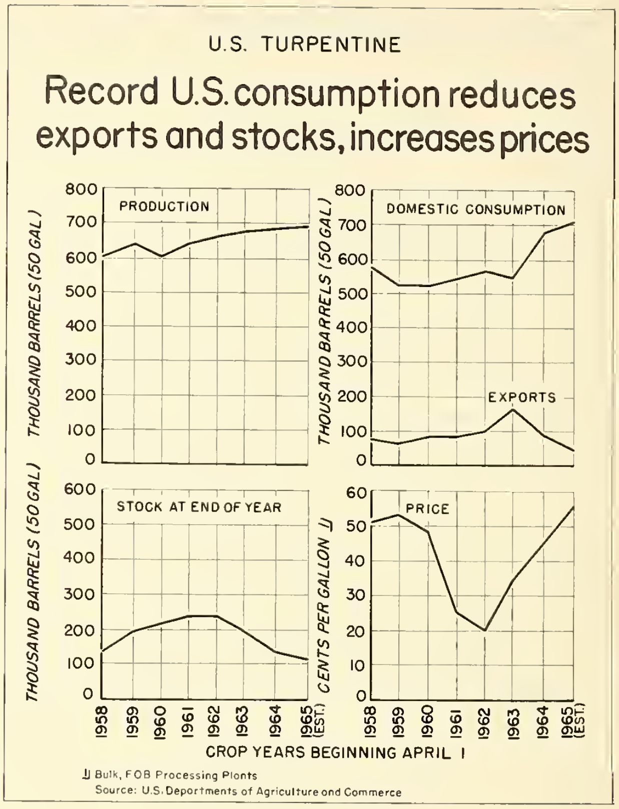
FIGURE 29

coatings. However, these markets perhaps have seen their best days.

Notwithstanding slightly higher gum rosin production and a substantial rise in tall oil rosin output in Western Europe, ample stocks in producing countries, increasing availability of low-priced Chinese rosin, and hand-to-mouth purchasing by importing countries, U.S. rosin exports are expected to increase by about 10 percent to the highest level since 1961. One of the primary influences on the export market has been the existence of large price-support loan stocks and the ATFA export sales program. These influences, together with low-priced and increased marketings of Chinese rosin, have had an initial unsettling influence on the market. It is remarkable that U.S. rosin exports likely will increase in spite of these influences. This results from increased rosin usage overseas, utilization of U.S. rosin at plants constructed by U.S. firms abroad, and substitution of rosin imports for imports of modified rosin.

Turpentine Industrial Utilization Rises at Expense of Exports and Retail Sales

Disappearance of U.S. turpentine will be lower in 1965 than in 1964, mainly because of an estimated 37,000-barrel reduction in supplies. Domestic disappearance is expected to increase about 5 percent, to an all-time high of about 708,000-barrels. Rapidly expanding industrial utilization of turpentine is limiting the volume of turpentine available for export and for retail distribution for solvent purposes. Exports are estimated at 40,000-barrels in 1965, a record low. It is less than half that for 1964, and one-fourth 1963 exports (fig. 30).


U.S. TURPENTINE

Record U.S. consumption reduces exports and stocks, increases prices

1/ Bulk, FOB Processing Plants
Source: U.S. Departments of Agriculture and Commerce

Figure 30

Industrial utilization of turpentine is based mainly on applications for alpha and beta pinene, the two primary constituents of turpentine. Alpha pinene goes mainly into synthetic pine oil, insecticides, and polyterpene resins. The principal outlet for beta pinene, and one that has been expanding rapidly, is in polyterpene resins for such purposes as pressure-sensitive tapes. Another important and growing market is in perfume chemicals. Scarcity of and price pressure on turpentine during the past 2 years is mainly from demand for the beta pinene fraction, which is found only in gum and sulfate wood turpentine. If all turpentine output were fractionated, alpha pinene production would be three times that of beta pinene. The recently reported development of an economical process for converting alpha to beta pinene should relieve the pressure on turpentine prices. However, this development may siphon off alpha pinene supplies required in synthetic pine oil.

Domestic Rosin Stocks Continue Rising, Turpentine Near Record Low

At the anticipated volumes of production and disappearance, the domestic rosin carryout next March 31 should rise 10 to 15 percent, to about 1.2 million drums, the highest in 23 years. Gum rosin price support collateral will constitute about two-thirds of the carryover.

At the rate of domestic and export disappearance through August 1965, the turpentine carryout next March 31 may be the lowest in 18 years.

Rosin Prices More Competitive, Turpentine Steady

Reflecting lower loan rates for several rosin grades, domestic gum rosin prices are expected to decline in 1965 after 3 years of stability at about $11.00 per cwt., in drums f.o.b. production points. The ATFA export sales program has, for all practical purposes, established a two-price system for gum rosin. Actually such dual pricing has been in effect for several years on lower priced tall oil and SD wood rosin. The ATFA export sales program also has narrowed the difference between export prices for United States and Western European gum rosin. U.S. gum rosin export prices are expected to become increasingly competitive with prices of Western European gum rosin and U.S. tall oil and SD wood rosin.

The price of gum and SD wood turpentine in mid-September was about 10 cents per gallon more than at the same time in 1964. If economical conversion of alpha to beta pinene develops on a large scale, no substantial increase is expected in turpentine prices for the next several months. Price levels in 1966 will depend partly on the extent of decline next year in gum and SD wood turpentine output.

LITERATURE CITED

(1) American Paper and Pulp Association.
Monthly statistical summary. (Contains statistics showing production, imports, and exports of paper, paperboard, and wood pulp; pulpwood consumption; employment and other related data.)

(2) American Plywood Association.
Plywood statistics. (Monthly. Contains statistics on production, new orders, shipments, inventories, and sales realization for softwood plywood.)

(3) American Pulpwood Association.
Monthly pulpwood summary. (Contains data on pulpwood consumption, domestic receipts, imports, and inventories by region and kind of wood.)

(4) Council of Economic Advisers.
Economic indicators. (Monthly. Contains statistics showing output, income, and spending; employment, unemployment, and wages; production and business activity; prices; money, credit, and security markets; and Federal finance.)

(5) Federal Reserve System, Board of Governors.
Business indexes. (Monthly. Contains indexes of industrial production by market and industry groupings.)

(6) ———
Federal Reserve Bulletin. (Monthly. Contains statistics showing interest rates; security prices; Federal finances; business finances; selected indexes on business activity; wholesale and consumer prices; sales, profits, and dividends of large manufacturing corporations, and related data.)

(7) Humboldt County, Calif.; Humboldt County Assessor's Office.
Humboldt County forest product report. (Monthly. Contains prices of logs in specified areas in Humboldt County.)

(8) Illinois Cooperative Crop Reporting Service, U.S. Department of Agriculture, and Illinois Technical Forestry Association cooperating.
Timber prices. (Semiannual. Quotes stumpage and delivered prices of saw logs and veneer logs for selected species, and delivered prices of pulpwood and cooperage bolts.)

(9) Louisiana Department of Agriculture and Immigration in cooperation with U.S. Department of Agriculture.
Louisiana timber products. (Quarterly. Quotes stumpage and delivered prices of saw logs and pulpwood for selected species, and delivered prices of poles and pine stumps.)

(10) Missouri Extension Service and School of Forestry, University of Missouri.
Missouri forestry and forest industries. (Quarterly. Timber prices are reported in the May and November issues. Quotes stumpage and delivered prices for saw logs, cooperage, and special products by region and selected species of sawtimber.)

(11) National Forest Products Association.
Fingertip facts and figures. (Monthly. Quotes statistics on lumber production, shipments, new orders, stocks, and other related data.)

(12) ———
National survey of lumber demand and supply. (Quarterly. Quotes statistics on lumber production, shipments, new orders, stocks, and other related data.)

(13) New Hampshire University, Cooperative Extension Service, in cooperation with the State Forestry and Recreation Commission.
New Hampshire forest market report. (Annual. Quotes stumpage, roadside, and delivered prices of saw logs, pulpwood, excelsior wood, poles, piling, boltwood, and other products, for selected species; and lumber prices.)

(14) Newsprint Service Bureau.

Newsprint statistics. (Monthly. Contains statistics on newsprint production, shipments, trade, and stocks of newsprint in the United States and Canada.)

(14a) Office of Iron Range Resources and Rehabilitation.

Minnesota forest products marketing and pricing review. (Semiannual. Quotes, for selected species, stumpage and delivered prices of saw logs, pulpwood, posts, poles, and piling; and mill prices of lumber.)

(15) Office of the President.

Economic report of the President. (Annual. Summarizes the economic developments of the year with a comprehensive statistical appendix containing tables relating to income, employment, production, and related economic series.)

(16) Ohio Department of Agriculture, Division of Markets; Ohio Department of Natural Resources, Division of Forestry; U.S. Department of Agriculture, Statistical Reporting Service.

Ohio timber prices. (Quarterly. Quotes stumpage prices of sawtimber, veneer timber, handle timber, and cooperage by selected species and region; delivered prices of saw logs and veneer logs by selected species and grade, and delivered prices of pulpwood and chemical wood.)

(17) Oregon State University Extension Service and U.S. Department of Agriculture cooperating.

Farm forest products market report. (Weekly. Quotes delivered saw log and veneer log prices for selected species and grades in several localities. Occasionally reports prices for such products as poles, piling, maple burls, sword fern, and short pulpwood.)

(18) Pogue, H. M. British Columbia Forest Service.

Progress to September 1962 and future prospects of the British Columbia sustained yield forest program. (Statement prepared for the U.S. Tariff Commission.)

(19) Securities and Exchange Commission.

Plant and equipment expenditures programs in 1965. (Quarterly. A report concerned with the actual and expected spending plans of business.)

(20) Southern Hardwood Lumber Manufacturers Association.

Weekly hardwood barometer. (Quotes statistics of production capacity, production orders, and shipments, and presents comparisons with earlier periods.)

(21) Southern Pine Association.

Weekly trade barometer. (Quotes statistics on southern pine lumber production, shipments, new orders, stocks, and other related data.)

(22) U.S. Department of Agriculture, Forest Service.

Pulpwood prices in the Midsouth. (Annual. A statistical release on pulpwood prices in the Midsouth, by hardwoods and softwoods and purchase point.)

(22a) ———

Pulpwood prices in the Southeast. (Annual. A statistical release on pulpwood prices in the Southeast, by hardwoods and softwoods and purchase point.)

(23) ———

Southern pulpwood production. (Annual. Contains information on pulpwood production by species group and by State and county in 12 southern States.)

(24) ———

Stumpage prices for sawtimber sold from National Forests, by selected species and region. (Quarterly. Contains data showing stumpage prices for timber sold from National Forests by selected species and region.)

(25) ———

Timber Trends in the United States. (A comprehensive appraisal of the present and prospective demands for and supplies of timber in the United States.)

(26) ———

Veneer log production and receipts in Eastern United States, by State and species, 1963.

(27) ———

Wood products used in FHA-inspected, single-family houses, 1959 and 1962. (Presents information on the structural characteristics and the volume of wood products consumed in new, single-family, detached houses inspected by the Federal Housing Administration in 1959 and 1962.)

(28) ———
Wood used in manufacturing industries. (Presents statistical information on the volume of lumber, plywood, veneer, hardboard, particleboard, and bolts used in manufacturing industries in 1960. Also contains some historical comparisons.)

(29) U.S. Forest Service Pacific Northwest Forest and Range Experiment Station.
Production, prices, employment, and trade in Pacific Northwest forest industries. (Quarterly. Provides current information on the timber situation in Oregon and Washington, including data on log production, lumber and plywood production and prices, employment in the forest industries, international trade in logs and lumber, volume and average prices of stumpage sold by public agencies, and other related items.)

(30) U.S. Department of Commerce, Bureau of the Census.
Business cycle developments. (Monthly. Brings together about 90 principal economic series and over 300 components in a convenient form for analysis and interpretation of current business conditions.)

(31) ———
Construction reports. Construction activity. Series C30. (Monthly. A statistical report showing the value of new construction put in place by type of construction.)

(32) ———
Construction reports. Housing starts. Series C20. (Monthly. Contains statistics showing new housing units started, total, and nonfarm by ownership, type of structure, and location.)

(33) ———
Current housing reports. Housing vacancies. Series H–111. (Quarterly. A statistical release showing rental and homeowner vacancy rates, by condition and type of housing units.)

(34) ———
Current industrial reports. Hardwood plywood. (Contains annual statistics on production and shipments of hardwood plywood by type of plywood, geographic divisions, and face species.)

(35) ———
Current industrial reports. Lumber production and mill stocks. (Annual. Contains statistics on lumber production by major species and producing region.)

(36) ———
Current industrial reports. Pulp, paper, and board. (Monthly. Contains statistics on pulpwood receipts, consumption, and inventories; wood pulp production, transfers and inventories; paper and board production by grades; and other related data.)

(37) ———
Current industrial reports. Softwood plywood and veneer. (Annual. Contains statistics on the production of softwood plywood and veneer and consumption of softwood veneer logs.)

(38) ———
Current population reports. Population estimates. Illustrative projections of the population of States: 1970 to 1985. Series P–25, No. 301. (Presents alternative series of projections of the population of States from 1970 to 1985.)

(39) ———
Current population reports. Population estimates. Projections of the population of the United States by age and sex: 1964 to 1985. Series P–25, No. 286. (This report presents four series of projections of population of the United States, by age and sex to 1985, and of total population to 2010.)

(40) ———
United States exports of domestic and foreign merchandise. (Annual. Contains data showing volume and value of exports by country of destination. Exports of lumber are broken down by major species and grade.)

(41) ———
United States imports of merchandise for consumption. (Annual. Contains data showing volume and value of imports by country of origin and major product. Imports of lumber are broken down by major species and grade.)

(42) U.S. Department of Commerce, Business and Defense Services Administration.
Construction review. (Monthly. Contains statistics on the volume of construction, construction costs, employment in construction, and related data.)

(43) ———

Pulp, paper, and board. (Quarterly. Contains statistics on pulpwood receipts, wood pulp and paper production, other related data and review of trends in the pulp and paper industry.)

(44) U.S. Department of Commerce, Office of Business Economics.

Business statistics. (Weekly. Supplement to the Survey of Current Business. Quotes statistics on commodity prices, retail sales, industrial production, new construction, personal income, employment, and other related series.)

(45) ———

Survey of current business. (Monthly. Contains statistics on the gross national product, national income, personal income and outlays, foreign transactions, Government receipts and expenditures, and related data.)

(46) U.S. Department of Labor, Bureau of Labor Statistics.

Consumer price index. (Monthly. Shows average changes in prices of goods and services usually bought by city families of wage earners and clerical workers.)

(47) ———

Prices and price indexes for individual commodities. (Monthly. Quotes (f.o.b. mill) prices of several hundred commodities including selected lumber items of important commercial species and plywood, pulp, and paper items.)

(48) U.S. Pulp Producers Association, Inc.

Monthly statistical summary. (Contains statistics showing U.S. pulp production by grade and use, shipments and inventories. Includes similar data for Canada.)

(49) University of Kentucky Cooperative Extension Service and Kentucky State Division of Forestry.

Kentucky forest utilization survey. (Semiannual. Quotes prices for stumpage, saw logs, fence posts, mine props, and other timber products by zone.)

(50) Washington Crop Reporting Service, in cooperation with USDA Agricultural Marketing Service and Forest Service; State Agricultural Extension Service; Forestry Department, Washington State University; and State Department of Natural Resources.

Forest products price report. (Quarterly. Quotes prices for delivered saw logs, veneer logs, poles, pulpwood, and other products, by region, selected species, and grade.)

(51) West Virginia Department of Agriculture and others.

West Virginia forest products market information. (Quarterly. Quotes stumpage and delivered prices of saw logs and mine timber logs for selected species.)

(52) Western Wood Products Association.

Barometer. (Weekly. Contains statistics on lumber production, shipments, and orders in the western woods region.)

(53) ———

Western lumber facts. (Monthly. Contains statistics on softwood lumber production, orders, shipments, stocks, and realization values in the western woods region by major species.)

APPENDIX

TABLE 1.—*Measures of economic growth and population in the United States, 1950–65*

Year and quarter	Gross national product	Disposable personal income	Expenditures for new construction		Business expenditures for new plant and equipment	Number of housing starts	Population	Index of industrial production
			1957–59 dollars	Current dollars				
	Billion dollars	*Billion dollars*	*Million dollars*	*Million dollars*	*Billion dollars*	*Thousand units*	*Millions*	*1957–59=100*
1950	284.8	206.9	43,576	33,575	20.6		152.3	74.9
1951	328.4	226.6	42,596	35,435	25.6		154.9	81.3
1952	345.5	238.3	42,882	36,828	26.5		157.6	84.3
1953	364.6	252.6	44,747	39,136	28.3		160.2	91.3
1954	364.8	257.4	47,164	41,380	26.8		163.0	85.8
1955	398.0	275.3	51,717	46,519	28.7		165.9	96.6
1956	419.2	293.2	50,034	47,601	35.1		168.9	99.9
1957	441.1	308.5	49,878	49,139	37.0		172.0	100.7
1958	447.3	318.8	50,270	50,153	30.5		174.9	93.7
1959	483.6	337.3	54,222	55,305	32.5	1,554	177.8	105.6
1960	503.8	350.0	52,171	53,941	35.7	1,296	180.7	108.7
1961	520.1	364.4	53,087	55,447	34.4	1,365	183.8	109.8
1962	560.3	385.3	55,880	59,576	37.3	1,492	186.7	118.3
1963	589.2	403.8	57,483	62,755	39.2	1,641	189.4	124.3
1964 [1]	628.7	435.8	58,803	65,817	44.9	1,591	192.1	132.0
1965: [1, 2]								
First quarter	656.4	451.9	58,856	66,845	49.0	1,524	193.8	139.3
Second quarter	665.9	458.9	59,257	67,553	49.6	1,572	194.4	141.6

[1] Preliminary estimates.

[2] Except for population, data shown by quarters are seasonally adjusted annual rates. Expenditures for new construction, number of housing starts, and the index of industrial production are 3-month averages. Population figures are for the month ending each quarter.

Source: Gross national product and disposable personal income, U.S. Department of Commerce, Office of Business Economics, *Survey of Current Business*, August 1965 (*45*).

Expenditures for new construction, U.S. Department of Commerce, Bureau of the Census, *Construction Reports* (Construction Activity, Series C30) (*31*).

Business expenditures for new plant and equipment 1950–52, and index of industrial production 1950–54, Office of the President, *Economic Report of the President*, January 1965 (*15*).

Business expenditures for new plant and equipment, 1953–65, and index of industrial production 1955–65, Council of Economic Advisors, *Economic Indicators*, August 1965 (*4*).

Housing starts 1959–64, U.S. Department of Commerce, Bureau of the Census, *Construction Reports* (Housing Starts, Series C20) (*32*) and 1st and 2d quarters 1965, Forest Service estimates.

Population, U.S. Department of Commerce, Bureau of the Census, Population Estimates, (Current Population Reports, Series P–25).

TABLE 2.—*Wood products used per unit in new FHA-inspected single-family detached houses, by product and region, 1959 and 1962*

Region	Lumber		Plywood		Hardboard		Insulation board		Particleboard	
	1959	1962	1959	1962	1959	1962	1959	1962	1959	1962
	Board feet	*Board feet*	*Square feet (⅜-inch basis)*	*Square feet (⅜-inch basis)*	*Square feet (⅛-inch basis)*	*Square feet (⅛-inch basis)*	*Square feet (½-inch basis)*	*Square feet (½-inch basis)*	*Square feet (¾-inch basis)*	*Square feet (¾-inch basis)*
North Atlantic	11,831	11,254	2,324	2,755	294	536	376	490	34	39
South Atlantic	12,814	12,376	1,877	2,674	433	537	885	1,164	31	31
Florida	5,599	6,110	1,688	2,349	206	212	88	75	43	45
Lake States	10,520	10,796	1,972	1,985	325	502	1,481	1,654	29	32
Central States	10,073	10,221	2,148	2,640	623	679	773	954	41	48
South Central	8,593	8,712	1,211	1,807	200	351	984	1,308	47	54
Northwest	11,966	11,801	2,036	2,683	571	546	786	731	50	54
Southwest	10,466	10,070	1,090	1,542	390	407	123	110	86	160
All regions	10,050	10,183	1,716	2,234	377	492	602	750	50	70

NOTE: Includes allowance for on-site and manfacturing waste. Wood products used in attached and detached garages and in carports not included.

Source: U.S. Department of Agriculture, Forest Service (*27*).

TABLE 3.—*Production, net imports, and apparent consumption of timber products, by major product, 1950–65*

[Million cubic feet, roundwood equivalent]

Year	Total domestic production	Apparent consumption	Industrial roundwood[1]													Fuelwood[2]
			Total			Saw logs			Veneer logs			Pulpwood			Other products[3]	
			Domestic production	Net imports	Apparent consumption[4]	Domestic production	Net imports[5]	Apparent consumption[4]	Domestic production	Net imports[6]	Apparent consumption[4]	Domestic production	Net imports[7]	Apparent consumption[4] [8]	Apparent consumption	Apparent consumption
1950	10,790	12,230	8,520	1,355	9,960	5,905	455	6,360	345	10	355	1,500	890	2,475	770	2,270
1951	10,955	12,055	8,725	1,190	9,825	5,780	235	6,020	390	10	400	1,825	945	2,675	730	2,230
1952	10,760	11,835	8,750	1,145	9,825	5,820	275	6,095	420	10	430	1,810	860	2,600	700	2,010
1953	10,690	11,935	8,770	1,225	10,015	5,710	330	6,040	475	25	500	1,910	870	2,800	675	1,920
1954	10,580	11,845	8,745	1,195	10,010	5,650	365	6,015	480	40	520	1,960	790	2,820	655	1,835
1955	10,920	12,250	9,175	1,290	10,505	5,785	430	6,215	575	60	635	2,185	800	3,025	630	1,745
1956	11,250	12,515	9,595	1,375	10,860	5,920	420	6,335	590	65	655	2,480	890	3,265	605	1,655
1957	10,165	11,325	8,600	1,195	9,760	5,100	335	5,435	560	70	630	2,360	790	3,115	580	1,565
1958	9,950	11,245	8,470	1,240	9,765	5,160	415	5,575	615	80	695	2,135	745	2,935	560	1,480
1959	10,720	12,205	9,330	1,425	10,815	5,745	515	6,260	720	115	835	2,330	795	3,185	535	1,390
1960	10,160	11,410	8,860	1,300	10,110	5,080	480	5,560	705	90	800	2,565	730	3,240	510	1,300
1961	9,865	11,285	8,650	1,365	10,070	4,945	545	5,485	765	100	860	2,450	720	3,235	490	1,215
1962	10,095	11,665	8,970	1,555	10,540	5,120	645	5,765	800	130	930	2,585	780	3,380	465	1,125
1963	10,400	12,030	9,290	1,595	10,920	5,325	695	6,020	870	150	1,015	2,635	750	3,425	460	1,110
1964 [9]	10,860	12,440	9,770	1,615	11,350	5,595	665	6,265	955	175	1,125	2,760	775	3,500	460	1,090
1965 [9]	11,080	12,770	10,005	1,690	11,695	5,625	640	6,265	1,015	200	1,215	2,905	850	3,755	460	1,075

[1] Includes all products, except fuelwood, commonly cut from round sections of trees.

[2] Includes small quantities of imported fuelwood.

[3] Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and a miscellaneous assortment of similar items.

[4] Columns may not add to totals because of rounding.

[5] Net imports of lumber converted to cubic feet roundwood. Small quantities of imported saw logs (roundwood form) are included in domestic production.

[6] Net imports of veneer logs represent the equivalent net imports of veneer and plywood converted to board feet log scale, and then to cubic feet roundwood. The small volume of veneer logs imported (roundwood form) is included in domestic production.

[7] Includes net pulpwood imports and the pulpwood equivalent of the net wood pulp and paper and paperboard imports.

[8] Includes changes in stocks.

[9] Preliminary estimates.

Source: Based on data published by the U.S. Departments of Commerce and Agriculture. Data for 1900–49 in *Demand and Price Situation for Forest Products, 1964*, table 2.

TABLE 4.—*Per capita consumption of timber products, by major product, 1950–65*

Year	All timber products[2]	Industrial roundwood[1]								Fuelwood	
		Total[2]	Saw logs		Pulpwood		Veneer logs		Other products		
	Cubic feet	*Cubic feet*	*Cubic feet*	*Board feet (lumber tally)*	*Cubic feet*	*Cords*	*Cubic feet*	*Board feet (local log rule)*	*Cubic feet*	*Cubic feet*	*Cords*
1950	80.3	65.4	41.8	269	16.3	0.2	2.3	13.6	5.1	14.9	0.2
1951	77.8	63.4	38.9	250	17.3	.2	2.6	15.1	4.7	14.4	.2
1952	75.1	62.3	38.7	249	16.5	.2	2.7	16.0	4.4	12.8	.2
1953	74.5	62.5	37.7	243	17.5	.2	3.1	18.4	4.2	12.0	.2
1954	72.7	61.4	36.9	237	17.3	.2	3.2	18.8	4.0	11.3	.2
1955	73.8	63.3	37.5	242	18.2	.2	3.8	22.6	3.8	10.5	.1
1956	74.1	64.3	37.5	242	19.3	.2	3.9	22.8	3.6	9.8	.1
1957	65.8	56.7	31.6	203	18.1	.2	3.7	21.6	3.4	9.1	.1
1958	64.3	55.8	31.9	206	16.8	.2	4.0	23.6	3.2	8.5	.1
1959	68.6	60.8	35.2	228	17.9	.2	4.7	27.8	3.0	7.8	.1
1960	63.1	55.9	30.8	199	17.9	.2	4.4	26.4	2.8	7.2	.1
1961	61.4	54.8	29.8	193	17.6	.2	4.7	28.1	2.7	6.6	.1
1962	62.5	56.5	30.9	200	18.1	.2	5.0	29.7	2.5	6.0	.1
1963	63.5	57.7	31.8	206	18.1	.2	5.4	32.1	2.4	5.9	.1
1964 [3]	64.8	59.1	32.6	210	18.2	.2	5.9	35.1	2.4	5.7	.1
1965 [3]	65.6	60.1	32.2	208	19.3	.2	6.2	37.2	2.4	5.5	.1

[1] Includes all products, except fuelwood, commonly cut from round sections of trees.

[2] Data may not add to totals because of rounding.

[3] Preliminary estimates.

Source: Based on data published by the U.S. Departments of Commerce and Agriculture. Data for 1900–49 in *Demand and Price Situation for Forest Products, 1964*, table 3.

TABLE 5.—*Average stumpage prices for sawtimber sold from National Forests, by selected species, 1950–65*

[Dollars per thousand board feet]

Year and quarter	Douglas-fir[1]		Southern pine[2]		Ponderosa pine[3]		Western hemlock[4]		Oak, white and red[5]		Maple[5]	
	Current dollars	1957–59 dollars[6]	Current dollars	1957–59 dollars[6]	Current dollars	1957–59 dollars[6]	Current dollars	1957–59 dollars[6]	Current dollars	1957–59 dollars[6]	Current dollars	1957–59 dollars[6]
1950	16.40	18.90	26.70	30.80	18.30	21.00	----------	----------	----------	----------	----------	----------
1951	25.40	26.30	34.60	35.80	33.60	34.70	----------	----------	----------	----------	----------	----------
1952	25.80	27.40	38.50	41.00	27.40	29.10	----------	----------	----------	----------	----------	----------
1953	20.20	21.80	34.20	36.90	25.90	27.90	----------	----------	----------	----------	----------	----------
1954	16.20	17.40	29.70	32.00	27.20	29.30	----------	----------	----------	----------	----------	----------
1955	28.90	31.00	32.00	34.30	26.10	28.00	----------	----------	----------	----------	----------	----------
1956	37.70	39.20	37.40	38.90	27.20	28.30	----------	----------	----------	----------	----------	----------
1957	26.20	26.50	31.50	31.80	24.20	24.40	----------	----------	----------	----------	----------	----------
1958	21.80	21.70	31.10	31.00	19.10	19.00	6.30	6.30	16.30	16.20	----------	----------
1959	36.80	36.60	35.20	35.00	20.60	20.50	11.10	11.00	21.40	21.30	31.90	31.70
1960	32.00	31.80	34.50	34.30	19.10	19.00	10.50	10.40	23.40	23.20	35.00	34.80
1961	27.60	27.50	26.80	26.70	12.10	12.10	9.70	9.70	15.70	15.70	26.80	26.70
1962	24.80	24.70	26.00	25.80	16.10	16.00	8.90	8.80	17.00	16.90	27.40	27.20
1963	27.90	27.80	25.10	25.00	15.80	15.80	10.40	10.40	15.70	15.70	35.30	35.20
1964	38.10	37.90	27.80	27.70	19.00	18.90	13.30	13.20	18.00	17.90	30.60	30.40
First quarter	35.90	35.70	25.90	25.70	16.80	16.70	11.60	11.50	19.90	19.80	35.80	35.60
Second quarter	37.00	37.00	28.40	28.40	19.00	19.00	12.20	12.20	18.40	18.40	30.40	30.40
Third quarter	37.00	36.80	27.40	27.30	16.50	16.40	18.20	18.10	13.50	13.40	28.10	28.00
Fourth quarter	41.60	41.30	28.70	28.50	25.80	25.60	13.10	13.00	17.30	17.20	25.30	25.10
1965:												
First quarter	42.80	42.30	29.30	29.00	24.60	24.30	21.30	21.00	21.80	21.50	33.80	33.40
Second quarter	42.40	41.50	31.40	30.70	19.40	19.00	17.90	17.50	23.70	23.20	31.50	30.80

[1] 1950–56, average prices of National Forest and Bureau of Land Management timber sales in western Washington and western Oregon; 1957–65, average prices of National Forest timber sales in western Washington and western Oregon.

[2] Average prices of National Forest timber sales in the South.

[3] Average prices of National Forest timber sales in California.

[4] Average prices of National Forest timber sales in western Washington and western Oregon.

[5] Average prices of National Forest timber sales in the East.

[6] Derived by dividing the price in current dollars by the Wholesale Price Index (1957–59=100) of all commodities.

NOTE: All U.S. Forest Service National Forest prices in this table are the bid prices for timber sold on a Scribner Decimal C log rule basis, including Knutsen-Vandenberg Act deposits for stand improvement but excluding cooperative deposits and slash-disposal payments.

Source: U.S. Department of Agriculture, Forest Service (*24*). Data for 1910–49 in *Demand and Price Situation for Forest Products, 1964*, table 5.

TABLE 6.—*Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 1964* [1]

Species and region [2]	Volume [3]	Value [4]	Average price per M bd. ft.
	Thousand board feet	*Dollars*	*Dollars*
Douglas-fir (West side):			
California [5]	357,446	5,673,854	15.87
Pacific Northwest	1,767,942	67,391,381	38.12
Total	2,125,388	73,065,235	34.38
Douglas-fir (East side):			
Northern Rocky Mtn	339,403	3,597,431	10.60
Rocky Mountain	8,137	21,015	2.58
Southwest	61,424	143,424	2.33
Intermountain	89,137	262,340	2.94
California	186,444	2,591,609	13.90
Pacific Northwest	351,577	3,842,327	10.93
Total	1,036,122	10,458,146	10.09
Ponderosa pine:			
Northern Rocky Mtn	112,425	1,804,760	16.05
Rocky Mountain	85,252	542,621	6.36
Southwest	288,763	1,671,750	5.79
Intermountain	172,056	1,205,919	7.01
California	650,803	12,386,891	19.03
Pacific Northwest	720,049	13,515,829	18.77
Total	2,029,348	31,127,770	15.34
Sugar and western white pine:			
Northern Rocky Mtn	147,786	2,354,919	15.93
California	236,033	5,466,265	23.16
Pacific Northwest	78,974	1,538,847	19.49
Total	462,793	9,360,031	20.23
Lodgepole pine:			
Northern Rocky Mtn	145,714	533,675	3.66
Rocky Mountain	172,365	440,715	2.56
Intermountain	61,334	217,186	3.54
California	6,497	11,297	1.74
Pacific Northwest	13,301	55,774	4.19
Total	399,211	1,258,647	3.15
Western hemlock:			
Northern Rocky Mtn	46,210	252,871	5.47
Pacific Northwest	739,751	9,860,150	13.33
Alaska	128,953	160,566	1.25
Total	914,914	10,273,587	11.23
Cedar:			
Northern Rocky Mtn	68,383	598,160	8.75
California	81,938	316,287	3.86
Pacific Northwest	98,476	1,718,820	17.45
Total	248,797	2,633,267	10.58
Larch:			
Northern Rocky Mtn	284,279	3,479,035	12.24
Pacific Northwest	52,932	397,386	7.51
Total	337,211	3,876,421	11.50
Redwood:			
California	19,502	482,060	24.72
Spruce:			
Northern Rocky Mtn	143,303	1,337,053	9.33
Rocky Mountain	135,952	394,409	2.90
Southwest	31,519	104,575	3.32
Intermountain	41,289	128,243	3.11
Pacific Northwest	29,626	376,217	12.70
Alaska	79,123	268,744	3.40
Total	460,812	2,609,241	5.66
True fir:			
Northern Rocky Mtn	198,306	993,488	5.01
Rocky Mountain	18,597	33,702	1.81
Southwest	52,430	54,415	1.04
Intermountain	41,481	77,847	1.88
California	725,637	3,297,147	4.54
Pacific Northwest [6]	440,355	5,414,352	12.30
Total	1,476,806	9,870,951	6.68
Southern pine:			
Northeast	16,091	322,984	20.07
South	448,702	12,484,890	27.82
Lake and Central	7,401	114,246	15.44
Total	472,194	12,922,120	27.37
Red and eastern white pine:			
Northeast	2,832	63,827	22.54
South	8,283	220,513	26.62
Lake and Central	10,569	221,936	21.00
Total	21,684	506,276	23.35
Jack pine:			
Lake and Central	881	7,070	8.02
Eastern hemlock:			
Northeast	7,124	106,593	14.96
South	2,954	39,262	13.29
Lake and Central	514	3,759	7.33
Total	10,592	149,614	14.13
White oak:			
Northeast	5,140	81,515	15.86
South	6,804	152,652	22.44
Lake and Central	2,379	49,625	20.86
Total	14,323	283,792	19.81
Red oak:			
Northeast	10,465	195,695	18.70
South	10,938	371,138	33.93
Lake and Central	25,213	245,505	9.74
Total	46,616	812,338	17.43

See footnotes at end of table.

TABLE 6.—*Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 1964* [1]—Continued

Species and region [2]	Volume [3]	Value [4]	Average price per M bd. ft.
	Thousand board feet	*Dollars*	*Dollars*
Yellow birch:			
Northeast	5,422	306,359	56.51
Lake and Central	3,006	222,735	74.09
Total	8,428	529,094	62.78
Maple:			
Northeast	16,310	525,361	32.21
Lake and Central	9,623	268,672	27.92
Total	25,933	794,033	30.62
Yellow-poplar, basswood, and cucumber:			
Northeast	7,649	176,468	23.07
South	8,727	388,237	44.49
Lake and Central	2,378	60,765	25.55
Total	18,754	625,470	33.35
Not specified by species	239,246	3,878,010	16.21
All species and regions	10,369,555	175,523,173	16.93

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[1] Excludes pulpwood and miscellaneous products; also excludes timber sold by land exchanges and from land utilization project lands.

[2] Administrative regions of the Forest Service.

[3] Scribner Decimal C log rule, except in Northeast Region where International ¼-inch log rule is used.

[4] Includes bid price plus KV payments.

[5] Includes Klamath and Six Rivers National Forests in northwest California.

[6] Includes 103,812 thousand board feet of noble fir at $18.79 per M.

Note: The stumpage prices shown in this table do not necessarily indicate values for any specific tract of public or private timber. Prices received for individual tracts may vary widely because of differences in timber quality, degree of competition, timber accessibility, variations in special costs, methods of allocating overhead costs by species, or other factors.

Source: U.S. Department of Agriculture, Forest Service (*24*).

TABLE 7.—*Lumber production, imports, exports, and consumption, 1950–65*

Year	Domestic production	Imports	Exports	Apparent consumption	Per capita consumption
	Billion board feet	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Board feet*
1950	38.0	3.4	0.5	40.9	269
1951	37.2	2.5	1.0	38.7	250
1952	37.5	2.5	.7	39.2	249
1953	36.7	2.8	.6	38.9	243
1954	36.4	3.1	.7	38.7	237
1955	37.4	3.6	.8	40.1	242
1956	38.2	3.4	.8	40.9	242
1957	32.9	3.0	.8	35.0	203
1958	33.4	3.4	0.7	36.1	206
1959	37.2	4.1	.8	40.5	228
1960	32.9	3.9	.9	36.0	199
1961	31.9	4.3	.8	35.5	193
1962	33.2	4.9	.8	37.3	200
1963	34.5	5.3	.9	39.0	206
1964 [1]	36.0	5.2	1.0	40.3	210
1965 [1]	36.2	5.0	.9	40.4	208

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[1] Preliminary estimates.

NOTE. Estimates of lumber production for 1964 and 1965 are based in part upon data published by the National Forest Products Association and related associations (*11, 12, 20, 21, 52, 53*).

Source: U. S. Department of Commerce, Bureau of the Census (*35*); U.S. Department of Agriculture, Forest Service. Data for selected years 1899–1949 in *Demand and Price Situation for Forest Products, 1964*, table 7.

TABLE 8.—*Consumption of selected timber products and other materials used in construction, manufacturing, and shipping, 1950–64*

Year	Lumber		Softwood plywood		Hardwood plywood		Insulation board	
	Consumption	Index 1954=100	Consumption	Index 1954=100	Consumption	Index 1954=100	Consumption	Index 1954=100
	Billion board feet		*Million sq. ft. (⅜-inch basis)*		*Million sq. ft. (surface measure)*		*Thousand tons*	
1950	40.9	105.7	----------	----------	----------	----------	825	83.1
1951	38.7	100.0	2,995	75.2	1,537	85.3	901	90.7
1952	39.2	101.3	3,166	79.5	1,585	88.0	886	89.2
1953	38.9	100.5	3,838	96.4	1,725	95.8	939	94.6
1954	38.7	100.0	3,982	100.0	1,801	100.0	993	100.0
1955	40.1	103.6	5,276	132.5	2,285	126.9	1,088	109.6
1956	40.9	105.7	5,417	136.0	2,356	130.8	1,090	109.8
1957	35.0	90.4	5,638	141.6	2,287	127.0	975	98.2
1958	36.1	93.3	6,475	162.6	2,320	128.8	1,052	105.9
1959	40.5	104.7	7,664	192.5	2.977	165.3	1,172	118.0
1960	36.0	93.0	7,757	194.8	2,361	131.1	1,096	110.4
1961	35.5	91.7	8,495	213.3	2,649	147.0	1,074	108.2
1962	37.3	96.4	9,311	233.8	3,195	177.3	1,078	108.6
1963	39.0	100.8	10,367	260.3	3,521	195.6	1,158	116.6
1964[1]	40.3	104.1	11,432	287.1	4,050	224.9	1,214	122.3

Year	Container board		Portland cement		Structural steel		Brick	
	Consumption	Index 1954=100	Shipments	Index 1954=100	Shipments	Index 1954=100	Shipments	Index 1954=100
	Thousand tons		*Million barrels*		*Thousand tons*		*Million bricks*	
1950	5,770	91.0	228	82.9	----------	----------	6,486	97.4
1951	6,191	97.6	241	87.6	----------	----------	6,307	94.7
1952	5,678	89.6	251	91.3	2,664	84.9	5,642	84.8
1953	6,577	103.7	261	94.9	3,117	99.4	5,771	86.7
1954	6,340	100.0	275	100.0	3,136	100.0	6,657	100.0
1955	7,356	116.0	293	106.5	3,659	116.7	7,741	116.3
1956	7,562	119.3	309	112.4	3,780	120.5	7,382	110.9
1957	7,394	116.6	290	105.5	4,632	147.7	6,306	94.7
1958	7,331	115.6	307	111.6	4,147	132.2	6,255	94.0
1959	8,108	127.9	335	121.8	3,296	105.1	7,258	109.0
1960	8,234	129.9	312	113.5	3,865	123.2	6,502	97.7
1961	8,793	138.7	321	116.7	3,821	121.8	6,528	98.1
1962	9,454	149.1	332	120.7	3,861	123.1	6,913	103.8
1963	9,840	155.2	349	126.9	4,097	130.6	7,405	111.2
1964[1]	10,368	163.5	366	133.1	4,241	135.2	7,744	116.3

[1] Preliminary.

Source: U.S. Departments of Commerce and Agriculture.

Table 9.—*Average lumber and plywood used per unit in new FHA-inspected single-family detached houses, by major end use and region, 1959 and 1962*

Major end use	All regions		North Atlantic		South Atlantic		Florida		Lake States		Central States		South Central		Northwest		Southwest	
	1959	1962	1959	1962	1959	1962	1959	1962	1959	1962	1959	1962	1959	1962	1959	1962	1959	1962
LUMBER (*Board feet*)																		
Framing:																		
Roof	1,302	1,348	1,349	1,381	1,348	1,410	1,323	1,384	1,097	1,087	1,212	1,284	1,330	1,451	1,106	1,136	1,424	1,455
Ceiling	836	881	818	826	1,035	1,025	597	631	882	875	843	898	775	867	893	932	911	922
Partition	1,401	1,500	1,432	1,479	1,391	1,516	1,261	1,378	1,283	1,340	1,337	1,481	1,381	1,568	1,339	1,402	1,570	1,604
Exterior wall	1,298	1,491	1,543	1,620	1,598	1,734	133	220	1,496	1,562	1,438	1,645	1,192	1,499	1,254	1,383	1,465	1,521
Floor	1,053	1,157	1,963	2,021	1,959	1,952	327	436	1,432	1,596	1,190	1,259	359	339	1,539	1,592	643	684
Total	5,890	6,377	7,105	7,327	7,331	7,637	3,641	4,049	6,190	6,460	6,020	6,567	5,037	5,724	6,131	6,445	6,013	6,186
Sheathing:																		
Roof	834	551	510	185	508	279	412	243	315	303	572	374	995	665	953	504	1,597	1,149
Wall	122	46	208	76	560	155	8	19	43	35	167	77	113	34	46	10	5	(1)
Total	956	597	718	261	1,068	434	420	262	358	338	739	451	1,108	699	999	514	1,602	1,149
Subflooring	682	555	1,061	624	1,113	1,014	80	109	777	910	426	232	244	139	1,435	1,175	898	753
Finish flooring	827	921	1,227	1,307	1,391	1,411	127	210	1,194	1,426	1,024	1,067	481	376	1,374	1,506	531	554
Siding	246	204	126	120	232	105	30	74	560	168	335	265	330	257	501	595	119	96
Millwork and trim	1,422	1,510	1,578	1,596	1,676	1,771	1,150	1,251	1,440	1,493	1,520	1,638	1,390	1,516	1,503	1,547	1,278	1,308
Other	27	19	16	19	3	4	151	155	1	1	9	1	3	1	23	19	25	24
Total	3,204	3,209	4,008	3,666	4,415	4,305	1,538	1,799	3,972	3,998	3,314	3,203	2,448	2,289	4,836	4,842	2,851	2,735
Total, all uses	10,050	10,183	11,831	11,254	12,814	12,376	5,599	6,110	10,520	10,796	10,073	10,221	8,593	8,712	11,966	11,801	10,466	10,070
PLYWOOD (*Square feet, ⅜-inch basis*)																		
Sheathing:																		
Roof	694	963	952	1,248	928	1,432	1,195	1,717	826	842	751	994	543	937	621	868	248	507
Wall	228	254	571	528	355	533	11	6	368	295	360	272	7	34	362	612	28	43
Total	922	1,217	1,523	1,776	1,283	1,965	1,206	1,723	1,194	1,137	1,111	1,266	550	971	983	1,480	276	550
Subflooring and underlayment	304	464	408	539	266	298	27	116	433	478	607	881	89	160	438	552	183	315
Finish flooring	27	24	7	5	4	13	(2)	13	2	1	4	27	110	87	3	3	32	11
Siding	50	75	32	37	2	60	23	34	20	23	56	44	36	84	135	137	85	133
Millwork and trim	413	454	354	398	322	338	432	463	323	346	370	422	426	505	477	511	514	533
Total	794	1,017	801	979	594	709	482	626	778	848	1,037	1,374	661	836	1,053	1,203	814	992
Total, all uses	1,716	2,234	2,324	2,755	1,877	2,674	1,688	2,349	1,972	1,985	2,148	2,640	1,211	1,807	2,036	2,683	1,090	1,542

[1] Less than 0.5 board foot.

[2] Less than 0.5 square foot.

Note: Includes allowance for on-site and manufacturing waste. Lumber and plywood used in attached and detached garages and in carports not included.

Source: U.S. Department of Agriculture, Forest Service (*27*).

TABLE 10.—*Lumber production, by section and by softwoods and hardwoods, 1950–65* [1]

[Billion board feet]

Year	All sections			North			South			West total [2]
	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	
1950	38.0	30.6	7.4	4.9	2.0	3.0	14.6	10.2	4.4	18.6
1951	37.2	29.5	7.7	5.0	1.7	3.3	13.3	8.9	4.4	18.9
1952	37.5	30.3	7.2	4.1	1.4	2.7	13.7	9.2	4.5	19.7
1953	36.7	29.5	7.2	5.0	1.5	3.5	11.8	8.1	3.7	19.9
1954	36.4	29.3	7.1	4.6	1.7	3.0	11.7	7.7	4.1	20.0
1955	37.4	29.8	7.6	4.5	1.5	3.0	12.2	7.7	4.5	20.7
1956	38.2	30.2	8.0	5.1	1.6	3.4	12.7	8.2	4.5	20.5
1957	32.9	27.1	5.8	4.1	1.8	2.2	10.3	6.7	3.5	18.6
1958	33.4	27.4	6.0	3.9	1.4	2.5	9.8	6.4	3.4	19.7
1959	37.2	30.5	6.7	4.2	1.5	2.7	11.0	7.0	3.9	22.0
1960	32.9	26.7	6.3	3.9	1.2	2.7	9.3	5.9	3.4	19.6
1961	32.0	26.1	6.0	3.7	1.2	2.5	9.1	5.8	3.4	19.2
1962	33.2	26.8	6.4	3.9	1.2	2.7	9.5	5.9	3.6	19.9
1963	34.5	27.8	6.7	4.0	1.1	2.9	9.9	6.1	3.7	20.7
1964 [3]	36.0	29.5	6.5	4.0	1.2	2.8	10.0	6.4	3.6	22.0
1965 [3]	36.2	29.5	6.7	4.1	1.3	2.8	10.3	6.5	3.8	21.8

[1] Data may not add to totals because of rounding.

[2] Includes small volumes of western hardwoods—about 0.1 billion board feet in recent years.

[3] Preliminary estimates.

NOTE: Estimates for 1964 and 1965 are based in part upon data published by the National Forest Products Association and related associations (*11, 12, 20, 21, 52, 53*).

Source: U.S. Department of Commerce, Bureau of the Census (*35*); U.S. Department of Agriculture, Forest Service. Data for selected years 1899–1949 in *Demand and Price Situation for Forest Products, 1964*, table 9.

TABLE 11.—*Wholesale price indexes for all commodities, and selected materials used in construction and shipping, 1950–65*

[1957–59=100]

Year	All commodities	Lumber		Softwood plywood		Hardwood plywood		Insulation board		Container board		Structural steel		Structural clay products [1]		Portland cement		Construction materials	
		Actual	Relative [2]	Actual	Relative [2]	Actual	Relative [2]	Actual	Relative [2]	Actual	Relative [2]	Actual	Relative [2]	Actual	Relative [2]	Actual	Relative [2]	Actual	Relative [2]
1950	86.8	93.9	108.2	121.5	140.0	96.7	111.4	74.3	85.6	82.2	94.7	62.3	71.8	71.7	82.6	72.1	83.1	83.0	95.6
1951	96.7	101.6	105.1	129.3	133.7	105.8	109.4	78.3	81.0	94.3	97.5	66.1	68.4	77.4	80.0	77.7	80.4	90.7	93.8
1952	94.0	99.0	105.3	117.8	125.3	96.6	102.8	79.7	84.8	92.5	98.4	67.5	71.8	77.8	82.8	77.7	82.7	89.6	95.3
1953	92.7	98.1	105.8	118.2	127.5	103.4	111.5	83.8	90.4	93.7	101.1	71.2	76.8	81.6	88.0	81.5	87.9	90.9	98.1
1954	92.9	96.4	103.8	114.4	123.1	95.7	103.0	88.2	94.9	95.9	103.2	74.1	79.8	84.9	91.4	84.4	90.8	91.1	98.1
1955	93.2	102.4	109.9	117.7	126.3	97.9	105.0	90.3	96.9	95.9	102.9	78.2	83.9	89.3	95.8	87.7	94.1	95.1	102.0
1956	96.2	104.6	108.7	107.7	112.0	99.9	103.8	94.5	98.2	98.9	102.8	83.9	87.2	94.3	98.0	93.2	96.9	99.0	102.9
1957	99.0	98.5	99.5	97.4	98.4	99.0	100.0	97.7	98.7	100.0	101.0	96.6	97.6	98.2	99.2	98.0	99.0	99.0	100.0
1958	100.4	97.0	96.6	98.1	97.7	99.7	99.3	99.8	99.4	100.0	99.6	100.6	100.2	99.8	99.4	100.5	100.1	98.9	98.5
1959	100.6	104.5	103.9	104.5	103.9	101.4	100.8	102.5	101.9	100.0	99.4	102.8	102.2	102.1	101.5	101.5	100.9	102.0	101.5
1960	100.7	99.9	99.1	92.9	92.3	102.8	102.1	102.2	101.5	99.6	98.9	102.8	102.1	103.1	102.4	103.5	102.8	100.5	99.8
1961	100.3	94.7	94.4	90.3	90.0	101.4	101.1	101.0	100.7	91.2	90.9	102.8	102.5	103.2	102.9	103.3	103.0	98.6	98.3
1962	100.6	96.5	95.9	87.3	86.8	97.8	97.2	94.5	93.9	92.4	91.8	102.8	102.2	103.5	102.9	103.1	102.5	98.3	97.7
1963	100.3	98.9	98.6	89.4	89.1	97.3	97.0	92.4	92.1	94.6	94.3	103.6	103.3	103.6	103.3	101.5	101.2	98.5	98.2
1964 [3]	100.5	100.7	100.2	86.7	86.3	98.5	98.0	90.4	90.0	97.5	97.0	105.9	105.4	104.4	103.9	101.0	100.5	99.6	99.1
1965:																			
January	101.0	100.8	99.8	90.6	89.7	98.2	97.2	89.2	88.3	97.5	96.5	105.9	104.9	105.0	104.0	101.3	100.3	100.2	99.2
February	101.2	101.4	100.2	88.0	87.0	98.2	97.0	87.3	86.3	97.5	96.3	105.9	104.6	105.1	103.9	101.3	100.1	100.3	99.1
March	101.3	101.3	100.0	86.6	85.5	98.2	96.9	87.2	86.1	97.5	96.2	105.9	104.5	105.1	103.8	101.3	100.0	100.2	98.9
April	101.7	101.0	99.3	86.2	84.8	98.2	96.6	87.3	85.8	97.5	95.9	105.9	104.1	105.1	103.3	101.1	99.4	100.3	98.6
May	102.1	101.0	98.9	85.1	83.3	98.2	96.2	88.0	86.2	97.5	95.5	105.9	103.7	105.1	102.9	101.1	99.0	100.7	98.6
June	102.8	101.0	98.2	83.8	81.5	98.2	95.5	88.0	85.6	97.5	94.8	105.9	103.0	105.1	102.2	101.1	98.3	100.7	98.0
July	102.9	101.2	98.3	84.7	82.3	98.2	95.4	89.3	86.8	97.5	94.8	105.9	102.9	105.1	102.1	101.1	98.2	100.8	98.0
August [3]	102.9	102.5	99.6	90.1	87.6	98.2	95.4	89.3	86.8	97.5	94.8	105.9	102.9	105.5	102.5	101.1	98.2	101.2	98.3

[1] Formerly listed as "Brick and tile" by the U.S. Department of Labor.

[2] Derived by dividing the "Actual" price index by the "All commodities" price index.

[3] Preliminary.

Source: U.S. Department of Labor, Bureau of Labor Statistics (*47*). Data for 1929–49 in *Demand and Price Situation for Forest Products, 1964*, table 10.

TABLE 12.—*United States imports of lumber by softwoods and hardwoods and country of origin, 1950–64* [1]

[Million board feet]

Year	All species [2]				Softwoods				Hardwoods			
	Total	Canada	Mexico	Other	Total [3]	Canada [3]	Mexico	Other	Total	Canada	Mexico	Other
1950	3,423.5	3,102.2	208.0	113.3	3,140.2	2,899.5	191.4	49.3	283.2	202.7	16.6	64.0
1951	2,511.6	2,240.3	135.5	135.8	2,250.0	2,080.2	119.0	50.8	261.6	160.1	16.5	84.9
1952	2,481.6	2,257.7	106.0	117.9	2,266.9	2,139.9	92.1	35.0	214.7	117.9	13.9	82.9
1953	2,759.4	2,541.2	83.8	134.3	2,526.8	2,409.6	73.0	44.2	232.6	131.7	10.9	90.1
1954	3,063.1	2,844.1	80.0	139.0	2,854.6	2,747.7	74.5	32.4	208.5	96.4	5.5	106.6
1955	3,593.0	3,349.7	75.3	168.1	3,326.8	3,225.9	69.7	31.2	266.3	123.8	5.6	136.9
1956	3,404.5	3,168.3	51.6	184.6	3,131.0	3,060.7	47.8	22.5	273.5	107.6	3.8	162.1
1957	2,958.0	2,754.0	53.0	150.9	2,711.9	2,644.7	48.2	19.0	246.1	109.3	4.8	132.0
1958	3,389.6	3,177.8	49.3	162.5	3,154.5	3,088.0	45.1	21.4	235.1	89.7	4.3	141.1
1959	4,063.6	3,785.9	53.1	224.6	3,741.5	3,661.7	49.7	30.2	322.0	124.2	3.4	194.4
1960	3,930.6	3,693.9	41.6	195.1	3,639.3	3,576.1	36.9	26.4	291.2	117.8	4.7	168.7
1961	4,257.9	4,042.6	48.5	166.8	4,013.4	3,943.4	43.7	26.3	244.5	99.2	4.8	140.5
1962	4,892.9	4,637.7	47.8	207.4	4,583.7	4,507.1	40.4	36.2	309.2	130.6	7.4	171.2
1963	5,335.4	5,104.7	28.6	202.0	5,032.0	4,975.6	24.4	32.0	303.3	129.1	4.3	170.0
1964	5,222.6	5,004.1	10.2	208.4	4,917.5	4,872.0	7.0	38.5	305.1	132.0	3.1	169.9

[1] Data may not add to totals because of rounding.

[2] Excludes mixed species (not classified as softwoods or hardwoods) for the years 1950–59.

[3] Includes small volumes of hardwoods for the years 1960–64.

Source: 1950–59 National Forest Products Association; 1960–64, U.S. Department of Agriculture, Forest Service, reporting statistics published by U.S. Department of Commerce, Bureau of the Census (*41*). Data for selected years 1929–49 in *Demand and Price Situation for Forest Products, 1964*, table 11.

TABLE 13.—*United States exports of lumber by softwoods and hardwoods and country of destination, 1950–64* [1]

[Million board feet]

Year	All species [2]					Softwoods					Hardwoods				
	Total	Canada	Europe [3]	Central [4] and South America	Other	Total	Canada	Europe [3]	Central [4] and South America	Other	Total	Canada	Europe [3]	Central [4] and South America	Other
1950	517.7	88.6	123.5	145.7	159.9	406.8	41.7	83.1	136.8	145.2	110.9	46.9	40.4	8.9	14.7
1951	997.6	134.5	366.5	176.0	320.7	875.7	71.4	324.2	164.6	315.4	121.9	63.1	42.2	11.3	5.3
1952	727.3	168.6	171.8	165.3	221.7	565.7	84.7	109.4	155.3	216.2	161.6	83.8	62.3	10.0	5.5
1953	643.1	161.2	93.6	144.6	243.7	512.6	75.8	71.2	136.8	228.8	130.5	85.5	22.3	7.8	14.9
1954	718.0	161.1	116.3	147.5	293.2	584.7	86.3	97.4	139.3	261.8	133.3	74.9	18.9	8.2	31.3
1955	841.0	218.7	145.3	173.3	303.8	652.4	119.1	95.8	147.6	289.9	188.6	99.6	49.5	25.7	13.9
1956	761.3	268.6	133.5	164.2	195.1	570.7	158.9	85.8	136.6	189.4	190.5	109.7	47.6	27.5	5.7
1957	811.1	237.4	122.8	171.5	279.4	623.4	138.6	88.1	148.8	247.9	187.7	98.8	34.7	22.7	31.5
1958	727.2	262.1	105.2	124.3	235.6	550.1	154.8	64.5	113.2	217.6	177.1	107.3	40.7	11.1	18.0
1959	787.3	333.6	98.3	120.3	235.0	607.9	198.5	80.5	104.2	224.8	179.4	135.1	17.9	16.2	10.2
1960	860.7	252.9	162.9	118.5	326.4	693.8	144.7	134.6	101.2	313.4	166.9	108.2	28.4	17.4	12.9
1961	773.1	232.5	152.7	87.4	300.6	618.2	150.2	108.4	80.3	279.3	154.9	82.3	44.3	7.0	21.3
1962	759.7	196.9	172.0	103.7	287.0	628.6	119.3	142.3	95.6	271.4	131.1	77.6	29.7	8.1	15.7
1963	877.5	186.1	232.0	98.6	360.9	743.1	107.9	198.9	92.0	344.2	134.4	78.1	33.1	6.5	16.7
1964	951.2	280.3	243.0	111.0	316.9	811.5	180.3	214.5	103.9	312.8	139.7	100.1	28.6	7.0	4.1

[1] Data may not add to totals because of rounding.

[2] Excludes mixed species (not classified as softwoods or hardwoods) for the years 1950–59.

[3] Including the United Kingdom.

[4] Including Mexico.

Source: 1950–59 National Forest Products Association; 1960–64, U.S. Department of Agriculture, Forest Service, reporting statistics published by U.S. Department of Commerce, Bureau of the Census (*40*). Data for selected years 1929–49 in *Demand and Price Situation for Forest Products, 1964*, table 12.

TABLE 14.—*Lumber*[1] *production in Canada, by softwoods and hardwoods, and region, 1950–63*[2]

[Billion board feet]

Year	All species	Softwoods					Hardwoods		
		Total	British Columbia[3]			Other Canada	Total	British Columbia	Other Canada
			Total	Coast	Interior				
1950	6.5	6.1	3.5	2.5	1.0	2.6	0.4		0.4
1951	6.9	6.4	3.7	2.5	1.2	2.7	.5		.5
1952	6.8	6.3	3.7	2.3	1.4	2.6	.5		.5
1953	7.3	6.8	4.1	2.6	1.5	2.7	.5		.5
1954	7.2	6.8	4.4	2.7	1.7	2.4	.4		.4
1955	7.9	7.5	5.0	2.8	2.2	2.6	.4		.4
1956	7.8	7.3	4.8	2.5	2.3	2.5	.5		.5
1957	7.1	6.7	4.4	2.3	2.1	2.2	.4		.4
1958	7.2	6.8	4.9	2.6	2.3	2.0	.4		.4
1959	7.6	7.2	4.9	2.3	2.6	2.3	.4		.4
1960	8.0	7.6	5.3	2.8	2.5	2.3	.4		.4
1961	8.2	7.8	5.6	3.0	2.7	2.2	.4		.4
1962	8.8	8.4	6.0	3.0	3.0	2.4	.4		.4
1963[4]	9.8	9.4	6.7	3.4	3.3	2.7	.5		.5

[1] Does not include sawn ties.

[2] Data may not add to totals because of rounding.

[3] Includes small volumes of hardwoods.

[4] Preliminary.

Source: Dominion Bureau of Statistics.

TABLE 15.— *Pulpwood consumption, production, net imports, and the equivalent wood volumes of the net imports of paper, board, and wood pulp, 1950–65*[1]

[Thousand cords]

Year	Total consumption	Consumption of pulpwood in U.S. mills	Domestic production of pulpwood					Net pulpwood imports	Net imports of paper, board, and wood pulp in terms of pulpwood equivalents
			Total	Roundwood			Chipped residues		
				Total	Softwood	Hardwood			
1950	33,659	23,627	20,716	19,466	16,679	2,787	1,250	1,385	10,032
1951	36,158	26,522	25,128	23,718	20,069	3,649	1,410	2,497	9,636
1952	35,404	26,461	25,045	23,477	20,002	3,475	1,568	2,108	8,943
1953	37,774	28,141	26,322	24,787	20,707	4,080	1,535	1,541	9,633
1954	38,056	29,436	26,972	25,471	20,945	4,526	1,501	1,562	8,620
1955	41,989	33,356	30,948	28,598	23,363	5,234	2,350	1,704	8,633
1956	45,448	35,749	35,196	32,146	26,212	5,934	3,050	1,762	9,699
1957	44,241	35,746	34,422	30,676	24,601	6,075	3,746	1,666	8,495
1958	43,592	35,248	33,239	28,090	22,445	5,646	5,149	1,269	8,344
1959	47,895	38,691	36,716	30,583	23,380	7,202	6,134	1,055	9,204
1960	48,730	40,485	40,012	33,468	25,454	8,014	6,544	1,158	8,245
1961	50,316	42,191	40,272	32,118	23,997	8,121	8,155	1,162	8,125
1962	52,855	44,070	42,772	33,811	24,866	8,945	8,961	1,292	8,785
1963	54,610	46,435	44,708	34,471	25,044	9,426	10,237	1,543	8,175
1964[2]	56,908	48,318	47,326	36,138	26,301	9,836	11,188	1,391	8,590
1965[2]	59,600	49,800	48,700	37,700	27,700	10,000	11,000	1,120	9,800

[1] Data may not add to totals because of changes in inventories, rounding, and statistical discrepancies in imports.

[2] Preliminary.

Source: U.S. Department of Commerce, Bureau of the Census; U.S. Department of Agriculture, Forest Service; American Paper and Pulp Association; and American Pulpwood Association (*1, 3, 14, 36, 43, 48*). Data for selected years 1909–49 in *Demand and Price Situation for Forest Products, 1964*, table 14.

TABLE 16.—*Pulpwood production, by section and by softwoods and hardwoods, 1950–65* [1]

[Million cords]

Year	All sections			North			South			West		
	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	Total	Softwoods [2]	Hardwoods
1950	20.7	17.8	2.9	5.0	3.3	1.7	12.4	11.2	1.2	3.3	3.3	---------
1951	25.1	21.3	3.8	6.3	4.1	2.2	14.1	12.5	1.6	4.7	4.7	---------
1952	25.0	21.4	3.6	6.0	4.1	1.9	14.6	12.8	1.8	4.5	4.5	---------
1953	26.3	22.2	4.2	5.4	3.2	2.2	16.2	14.1	2.0	4.7	4.7	---------
1954	27.0	22.2	4.8	5.5	2.9	2.6	16.4	14.2	2.2	5.1	5.1	---------
1955	30.9	25.6	5.3	6.5	3.9	2.6	18.4	15.7	2.6	6.0	5.9	0.1
1956	35.2	29.1	6.1	7.4	4.4	3.0	20.3	17.4	2.9	7.5	7.3	.2
1957	34.4	28.2	6.2	7.3	4.3	3.0	19.8	16.8	3.0	7.4	7.2	.2
1958	33.2	27.3	5.9	6.2	3.6	2.6	20.2	17.1	3.1	6.8	6.6	.2
1959	36.7	29.1	7.6	6.6	3.3	3.3	22.8	18.7	4.0	7.4	7.1	.3
1960	40.0	31.5	8.5	7.9	4.2	3.7	23.6	19.1	4.5	8.5	8.2	.3
1961	40.3	31.5	8.8	7.2	3.6	3.6	24.2	19.4	4.9	8.9	8.5	.3
1962	42.8	33.0	9.8	7.8	4.0	3.8	25.6	20.0	5.6	9.4	9.0	.3
1963	44.7	34.2	10.5	8.0	3.9	4.1	26.6	20.7	5.9	10.1	9.6	.5
1964 [3]	47.3	36.3	11.0	8.0	3.8	4.2	28.8	22.5	6.4	10.5	10.1	.5
1965 [3]	48.7	37.5	11.2	8.2	3.9	4.3	29.9	23.4	6.5	10.6	10.2	.5

[1] Data may not add to totals because of rounding.
[2] Includes small volumes of hardwoods prior to 1955.
[3] Preliminary estimates.

Source: U.S. Department of Commerce, Bureau of the Census (*36*); U.S. Department of Agriculture, Forest Service (*23*). Data for selected years 1899–1949 in *Demand and Price Situation for Forest Products, 1964*, table 15.

TABLE 17.—*Pulpwood prices at local delivery points, 1950–65*

[Dollars per standard cord, including bark]

Year	Wisconsin		Southeast		Midsouth		
	Spruce	Aspen	Southern pine	Hardwoods	Southern pine	Hardwoods	Pine plant byproducts
	Roundwood						
1950	19.50	9.50	11.90	-------------	12.15	10.65	-------------
1951	22.50	10.50	13.80	-------------	14.25	13.00	-------------
1952	25.00	12.25	13.90	-------------	14.30	12.90	-------------
1953	23.25	12.00	13.90	-------------	14.25	12.80	-------------
1954	24.25	12.50	14.00	-------------	14.30	12.85	-------------
1955	24.75	11.50	14.40	-------------	14.60	12.90	-------------
1956	26.00	12.25	15.40	-------------	15.65	13.50	-------------
1957	26.00	11.75	15.50	13.35	15.30	13.35	14.25
1958	26.25	12.00	15.50	13.45	15.30	13.10	14.30
1959	26.25	11.50	16.00	13.70	15.70	13.10	14.30
1960	26.75	12.00	16.45	13.60	16.05	13.10	14.40
1961	27.25	13.00	16.55	13.50	15.85	13.05	14.50
1962	27.25	12.75	16.55	13.40	15.80	13.20	14.60
1963	25.75	13.75	16.55	13.45	15.75	13.10	14.40
1964	-------------	-------------	17.00	13.60	15.90	13.15	14.30
1965 [1]	-------------	-------------	17.25	13.75	15.90	13.15	14.30

[1] Preliminary estimates.

Source: Spruce and aspen, University of Wisconsin, Extension Forestry Office; southern pine, hardwoods, and plant byproducts, U.S. Department of Agriculture, Forest Service (*22, 22a*). Data for 1940–49 in *Demand and Price Situation for Forest Products, 1964*, table 16.

TABLE 18.—*Production*[1] *of veneer logs, by softwoods and hardwoods, 1951–65*

[Million board feet, local log rule]

Year	All species	Softwoods	Hardwoods
1951	2, 271	1, 232	1, 039
1952	2, 467	1, 548	919
1953	2, 812	1, 861	951
1954	2, 846	1, 978	868
1955	3, 433	2, 431	1, 002
1956	3, 513	2, 493	1, 020
1957	3, 332	2, 455	877
1958	3, 713	2, 884	829
1959	4, 350	3, 488	862
1960	4, 276	3, 446	830
1961	4, 628	3, 836	792
1962	4, 854	4, 068	786
1963	5, 293	4, 515	778
1964	5, 810	4, 985	825
1965 [2]	6, 175	5, 300	875

[1] Includes small volumes of imported logs.

[2] Preliminary estimates.

Source: U.S. Department of Commerce, Bureau of the Census (*34, 37*); U.S. Department of Agriculture, Forest Service (*26*). Data for selected years 1905–47 in *Demand and Price Situation for Forest Products, 1964*, table 18.

TABLE 19.—*United States imports and exports of plywood, by softwoods and hardwoods, 1950–64*

[Thousand square feet, surface measure]

Year	Imports					Exports		
	Total	Softwoods	Hardwoods			Total	Softwoods	Hard-woods [1]
			Total	Birch	Other [1]			
1950	63, 362	95	63, 267	51, 221	12, 047	3, 816	3, 279	537
1951	73, 871	3, 680	70, 191	50, 428	19, 763	4, 550	3, 915	635
1952	85, 500	529	84, 971	62, 171	22, 800	13, 461	13, 095	366
1953	220, 846	472	220, 374	90, 120	130, 254	10, 273	9, 648	625
1954	434, 472	432	434, 040	110, 149	323, 891	7, 335	6, 682	653
1955	627, 760	124	627, 636	156, 579	471, 057	10, 352	8, 121	2, 231
1956	706, 524	-	706, 524	146, 292	560, 232	16, 096	14, 745	1, 351
1957	846, 912	465	846, 447	113, 867	732, 580	15, 536	14, 668	868
1958	911, 361	2	911, 359	97, 728	813, 631	14, 044	11, 800	2, 244
1959	1, 330, 225	-	1, 330, 225	136, 838	1, 193, 387	75, 113	71, 864	3, 249
1960	1, 024, 540	10, 514	1, 014, 026	130, 098	883, 928	15, 880	13, 074	2, 806
1961	1, 110, 169	12, 725	1, 097, 444	131, 726	965, 718	17, 235	13, 705	3, 530
1962	1, 451, 711	12, 805	1, 438, 906	161, 434	1, 277, 472	19, 151	16, 669	2, 482
1963	1, 630, 483	9, 814	1, 620, 669	196, 801	1, 423, 868	19, 094	17, 525	1, 569
1964	1, 952, 023	4, 855	1, 947, 168	227, 283	1, 719, 885	31, 057	28, 233	2, 824

[1] Includes mixed species (not classified as softwoods or hardwoods).

Source: U.S. Department of Commerce, Bureau of the Census (*40, 41*).

Table 20.— *United States imports and exports of veneer, by kind, 1950–64*

[Thousand square feet, surface measure]

Year	Imports			Exports		
	Total	Birch or maple	Other	Total	Fancy, face, figured, and special	Utility, commercial, and container
1950	361, 930	161, 852	200, 078	34, 518	20, 780	13, 738
1951	443, 232	177, 486	265, 746	40, 621	22, 139	18, 482
1952	428, 000	253, 304	174, 696	30, 689	19, 080	11, 609
1953	583, 517	335, 607	247, 910	49, 147	31, 900	17, 247
1954	584, 205	312, 215	271, 990	43, 292	27, 753	15, 539
1955	765, 373	328, 980	436, 393	51, 736	28, 608	23, 128
1956	729, 149	377, 330	351, 819	51, 526	32, 343	19, 183
1957	502, 788	316, 877	185, 911	51, 916	34, 246	17, 670
1958	650, 431	376, 499	273, 932	60, 703	37, 896	22, 807
1959	1, 063, 981	496, 500	567, 481	66, 115	37, 764	28, 351
1960	877, 997	463, 638	414, 359	60, 173	30, 541	29, 632
1961	943, 415	514, 702	428, 713	58, 075	29, 252	28, 823
1962	1, 276, 113	624, 376	651, 737	64, 804	31, 122	33, 682
1963	1, 467, 726	664, 614	803, 112	79, 102	43, 452	35, 650
1964	1, 736, 767	751, 837	984, 930	144, 345	78, 885	65, 460

Source: U.S. Department of Commerce, Bureau of the Census (*40, 41*).

Table 21.—*United States imports of hardwood*[1] *plywood, by country of origin, 1950–64*[2]

[Million square feet, surface measure]

Year	Total	Canada	Latin America				Asia				Africa	Europe	Other
			Total	Mexico	Central America and West Indies	South America	Total	Japan	Philippines	Other Asia			
1950	63. 3	50. 0	6. 3	0. 8	----------	5. 5	5. 4	5. 1	0. 3	----------	----------	1. 5	----------
1951	70. 2	47. 2	5. 6	. 7	0. 1	4. 8	13. 1	12. 9	. 1	0. 1	0. 4	3. 8	----------
1952	85. 0	57. 1	3. 7	. 9	. 1	2. 6	17. 6	17. 3	. 1	. 1	. 6	6. 0	----------
1953	220. 4	50. 8	8. 6	2. 1	1. 9	4. 5	106. 3	105. 0	. 5	. 8	3. 6	51. 0	----------
1954	434. 0	71. 1	8. 0	3. 4	. 2	4. 4	291. 8	289. 0	1. 5	1. 2	5. 3	51. 7	6. 2
1955	627. 6	99. 3	8. 8	3. 6	1. 4	3. 9	439. 2	428. 6	9. 8	. 8	10. 9	62. 5	6. 9
1956	706. 5	81. 2	5. 3	. 4	1. 0	3. 9	543. 5	527. 2	14. 9	1. 4	13. 8	53. 4	9. 3
1957	846. 4	64. 4	9. 2	1. 8	1. 9	5. 6	717. 6	679. 8	33. 2	4. 6	11. 0	40. 4	3. 9
1958	911. 4	42. 4	11. 9	6. 0	. 6	5. 3	794. 3	669. 6	97. 4	27. 3	15. 6	46. 3	. 9
1959	1, 330. 2	60. 2	32. 1	8. 6	4. 4	19. 1	1, 083. 0	810. 9	213. 6	58. 5	25. 8	125. 1	4. 0
1960	1, 014. 0	43. 0	13. 8	2. 5	1. 8	9. 5	857. 1	688. 3	118. 8	50. 0	16. 7	83. 2	. 2
1961	1, 097. 4	42. 1	17. 7	1. 4	2. 5	13. 9	962. 0	660. 5	153. 4	148. 2	14. 6	58. 6	2. 4
1962	1, 438. 9	56. 6	15. 7	1. 3	. 7	13. 7	1, 268. 8	740. 3	214. 4	314. 1	13. 8	83. 7	. 4
1963	1, 620. 7	71. 9	18. 8	1. 2	1. 2	16. 4	1, 428. 4	739. 8	246. 7	442. 0	9. 1	92. 5	----------
1964	1, 947. 2	68. 1	13. 7	. 2	2. 2	11. 3	1, 747. 2	680. 5	355. 7	[3] 711. 0	9. 3	108. 8	----------

Source: U.S. Department of Commerce, Bureau of the Census (*41*).

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[1] Includes mixed species (not classified as hardwoods or softwoods).

[2] Data may not add to totals because of rounding.

[3] Includes 461 million square feet from Taiwan and 206 million square feet from Korea.

TABLE 22.—*United States imports of hardwood[1] veneer, by country of origin, 1950–64*[2]

[Million square feet, surface measure]

Year	Total	Canada	Latin America				Asia				Africa	Europe	Other
			Total	Mexico	Central America and West Indies	South America	Total	Japan	Philippines	Other Asia			
1950	361.9	348.5	2.3	----------	2.3	----------	0.6	0.5	0.1	----------	3.4	7.1	0.1
1951	443.2	396.5	8.2	----------	7.6	0.6	2.0	2.0	----------	----------	31.8	4.6	.1
1952	428.0	402.4	6.0	0.3	5.6	.1	.9	.6	.3	----------	15.8	2.9	----------
1953	583.5	511.6	1.0	----------	1.0	----------	21.3	.3	21.0	----------	45.0	4.4	.1
1954	584.2	524.1	2.5	2.1	.4	----------	29.0	.3	28.6	0.1	24.2	3.1	1.2
1955	765.4	674.6	6.9	6.1	.8	----------	51.2	.3	49.7	1.2	29.0	2.8	.9
1956	729.1	621.0	7.7	7.3	.4	----------	56.2	3.3	51.4	1.5	38.9	5.3	----------
1957	502.8	373.7	9.3	4.8	4.4	----------	77.2	7.4	69.5	.3	37.8	4.7	.1
1958	650.4	455.6	7.4	1.3	5.9	.2	153.4	82.2	70.7	.5	29.5	4.3	.2
1959	1,064.0	559.9	21.1	4.3	6.5	10.3	399.8	225.4	174.1	.3	57.7	25.5	.1
1960	840.8	472.3	22.3	5.2	5.9	11.3	225.2	19.9	205.0	.3	98.1	22.8	.1
1961	894.8	515.9	27.6	5.8	8.8	13.0	237.0	8.6	223.7	4.7	96.0	18.2	.1
1962	1,232.2	638.4	42.7	3.5	16.9	22.3	338.4	5.7	295.6	37.1	168.7	44.0	.1
1963	1,397.9	684.6	63.1	1.7	14.3	47.2	455.2	4.0	391.0	60.1	146.9	48.2	----------
1964	1,708.3	781.3	69.8	.7	21.8	47.3	664.4	2.1	557.2	105.2	158.8	33.8	.2

[1] Includes mixed species (not classified as hardwoods or softwoods).

[2] Data may not add to totals because of rounding.

Source: U.S. Department of Commerce, Bureau of the Census (*41*).

TABLE 23.—*Rosin and turpentine: supplies, requirements, and prices, for crop years beginning April 1, 1958–65*

[ROSIN (520-lb. drums)]

Crop year beginning Apr. 1	Source	Supply				Requirements			Carry-out stocks [1]	Average price
		Carry-in stocks [1]	Production	Imports	Total supply	Domestic	Export	Total		
										Dollars per cwt.[2]
	Gum	559, 450	369, 350	600	929, 400	278, 430	101, 630	380, 060	549, 340	8. 33
	Steam distilled wood	70, 740	1, 182, 620	0	1, 253, 360	845, 880	342, 870	1, 188, 750	64, 610	----------
	Tall oil	38, 660	305, 060	0	343, 720	252, 220	64, 450	316, 670	27, 050	----------
1958	Total	668, 850	1, 857, 030	600	2, 526, 480	1, 376, 530	508, 950	1, 885, 480	641, 000	----------
	Gum	549, 340	334, 110	2, 110	885, 560	408, 420	305, 620	714, 040	171, 520	9. 59
	Steam distilled wood	64, 610	1, 198, 690	0	1, 263, 300	811, 840	396, 550	1, 208, 390	54, 910	----------
	Tall oil	27, 050	382, 970	0	410, 020	305, 480	79, 840	385, 320	24, 700	----------
1959	Total	641, 000	1, 915, 770	2, 110	2, 558, 880	1, 525, 740	782, 010	2, 307, 750	251, 130	----------
	Gum	171, 520	370, 150	350	542, 020	262, 110	156, 720	418, 830	123, 190	14. 52
	Steam distilled wood	54, 900	1, 219, 850	0	1, 274, 750	756, 560	373, 490	1, 130, 050	144, 700	----------
	Tall oil	24, 700	419, 960	0	444, 660	303, 490	97, 380	400, 870	43, 790	----------
1960	Total	251, 120	2, 009, 960	350	2, 261, 430	1, 322, 160	627, 590	1, 949, 750	311, 680	----------
	Gum	123, 190	474, 500	[3] 420	598, 110	265, 560	153, 310	418, 870	179, 240	11. 95
	Steam distilled wood	144, 700	1, 105, 410	[3] 3, 000	1, 253, 110	778, 530	316, 680	1, 095, 210	157, 900	----------
	Tall oil	43, 790	471, 150	0	514, 940	318, 580	73, 220	391, 800	123, 140	----------
1961	Total	311, 680	2, 051, 060	3, 420	2, 366, 160	1, 362, 670	543, 210	1, 905, 880	460, 280	----------
	Gum	179, 240	492, 890	[3] 500	672, 630	225, 380	91, 050	316, 430	356, 200	11. 05
	Steam distilled wood	157, 900	1, 093, 770	[3] 8, 680	1, 260, 350	741, 150	344, 110	1, 085, 260	175, 090	----------
	Tall oil	123, 140	477, 600	0	600, 740	358, 880	83, 930	442, 810	157, 930	----------
1962	Total	460, 280	2, 064, 260	9, 180	2, 533, 720	1, 325, 410	519, 090	1, 844, 500	689, 220	----------
	Gum	356, 200	458, 960	2, 112	817, 272	184, 502	64, 700	249, 202	568, 070	11. 00
	Steam distilled wood	175, 090	1, 098, 050	(7)	1, 273, 140	743, 980	318, 560	1, 062, 540	210, 600	----------
	Tall oil	157, 930	527, 930	(7)	685, 860	420, 530	101, 290	521, 820	164, 040	----------
1963	Total	689, 220	2, 084, 940	2, 112	2, 776, 272	1, 349, 012	484, 550	1, 833, 562	942, 710	----------
	Gum	568, 070	392, 600	4, 250	964, 920	173, 640	54, 120	227, 760	737, 160	11. 00
	Steam distilled wood	210, 600	1, 036, 370	(7)	1, 246, 970	743, 570	329, 790	1, 073, 360	173, 610	----------
	Tall oil	164, 040	586, 040	(7)	750, 080	477, 600	100, 490	578, 090	171, 990	----------
1964	Total	942, 710	2, 015, 010	4, 250	2, 961, 970	1, 394, 810	484, 400	1, 879, 210	1, 082, 760	----------
	Gum	737, 000	370, 000	2, 000	1, 109, 000	155, 000	100, 000	255, 000	854, 000	----------
	Steam distilled wood	174, 000	1, 090, 000	(7)	1, 264, 000	750, 000	325, 000	1, 075, 000	189, 000	----------
	Tall oil	172, 000	630, 000	(7)	802, 000	515, 000	110, 000	625, 000	177, 000	----------
1965 (estimated)	Total	1, 083, 000	2, 090, 000	2, 000	3, 175, 000	1, 420, 000	535, 000	1, 955, 000	1, 220, 000	----------

[TURPENTINE (50-gal. bbls.)]

Crop year beginning Apr. 1	Source	Carry-in stocks [1]	Production	Imports	Total supply	Domestic	Export	Total	Carry-out stocks [1]	Average price
										Dollars per gal.[4]
	Gum	42, 880	120, 300	22, 150	185, 330	121, 900	30, 100	152, 000	33, 330	. 513
	Steam distilled wood	[5] 69, 000	172, 600	0	241, 600	153, 870	25, 730	179, 600	[5] 62, 000	----------
	Sulfate	[5] 39, 220	315, 340	0	354, 560	299, 310	16, 680	315, 990	[5] 38, 570	----------
1958	Total	151, 100	608, 240	22, 150	781, 490	575, 080	72, 510	647, 590	133, 900	----------
	Gum	33, 330	107, 400	15, 440	156, 170	94, 250	28, 970	123, 220	32, 950	. 534
	Steam distilled wood	[5] 62, 000	175, 950	0	237, 950	116, 460	21, 490	137, 950	[5] 100, 000	----------
	Sulfate	[5] 38, 570	353, 400	0	391, 970	318, 020	11, 420	329, 440	[5] 62, 530	----------
1959	Total	133, 900	636, 750	15, 440	786, 090	528, 730	61, 880	590, 610	195, 480	----------

See footnotes at end of table.

TABLE 23.—*Rosin and turpentine: supplies, requirements, and prices, for crop years beginning April 1, 1958–65*—Continued

[TURPENTINE (50-gal. bbls.)]

Crop year beginning Apr. 1	Source	Supply				Requirements			Carry-out stocks [1]	Average price
		Carry-in stocks [1]	Production	Imports	Total supply	Domestic	Export	Total		
										Dollars per gal.[4]
	Gum	32, 950	118, 950	15, 570	167, 470	92, 150	23, 200	115, 350	52, 120	. 479
	Steam distilled wood	[5] 100, 000	162, 880	0	262, 880	136, 990	27, 890	164, 880	[5] 98, 000	------------
	Sulfate	[5] 62, 530	322, 940	0	385, 470	293, 630	30, 660	324, 290	[5] 61, 180	------------
1960	Total	195, 480	604, 770	15, 570	815, 820	522, 770	81, 750	604, 520	211, 300	------------
	Gum	52, 120	152, 810	15, 220	220, 150	107, 960	47, 120	155, 080	65, 070	. 245
	Steam distilled wood	[5] 98, 000	151, 470	0	249, 470	154, 710	23, 720	178, 430	[5] 71, 040	------------
	Sulfate	[5] 61, 180	332, 830	0	394, 010	283, 260	11, 370	294, 630	[5] 99, 380	------------
1961	Total	211, 300	637, 110	15, 220	863, 630	545, 930	82, 210	628, 140	235, 490	------------
	Gum	65, 070	152, 100	12, 910	230, 080	102, 780	58, 320	161, 100	68, 980	. 201
	Steam distilled wood	[5] 71, 040	152, 610	0	223, 650	[6] 131, 920	26, 420	158, 340	65. 310	------------
	Sulfate	[5] 99, 380	348, 350	0	447, 730	[6] 333, 560	15, 630	349, 190	98, 540	------------
1962	Total	235, 490	653, 060	12, 910	901, 460	568, 260	100, 370	668, 630	232, 830	------------
	Gum	68, 980	140, 520	13, 900	223, 400	99, 230	91, 820	191, 050	32, 350	. 339
	Steam distilled wood	65, 310	157, 480	0	222, 790	117, 700	40, 000	157, 700	65, 090	------------
	Silfate	98, 540	375, 530	0	474, 070	344, 000	31, 450	375, 450	98, 620	------------
1963	Total	232, 830	673, 530	13, 900	920, 260	560, 930	163, 270	724, 200	196, 060	------------
	Gum	32, 350	119, 580	23, 090	175, 020	101, 230	47, 200	148, 430	26, 590	. 450
	Steam distilled wood	65, 090	157, 450	0	222, 540	157, 440	25, 400	182, 840	39, 700	------------
	Sulfate	98, 620	400, 480	0	499, 100	416, 040	12, 300	428, 340	70, 760	------------
1964	Total	196, 060	677, 510	23, 090	896, 660	674, 710	84, 900	759, 610	137. 050	------------
	Gum	26, 000	112, 000	25, 000	163, 000	118, 000	15, 000	133, 000	30, 000	------------
	Steam distilled wood	40, 000	166, 000	0	206, 000	150, 000	15, 000	165, 000	41, 000	------------
	Sulfate	71, 000	420, 000	0	491, 000	440, 000	10, 000	450, 000	41, 000	------------
1965 (estimated)	Total	137, 000	698, 000	25, 000	860, 000	708, 000	40, 000	748, 000	112, 000	------------

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[1] These are gross stocks, including quantities sold and awaiting shipment. They include price-support stocks.

[2] Price in drums f.o.b. production points.

[3] Estimated allocation, as between SD and gum rosin, of total rosin imports reported by Bureau of the Census.

[4] F.o.b. tank cars at production points.

[5] Estimated allocation, as between SD and sulfate turpentine stocks, of *total* wood turpentine stocks reported by Crop Reporting Board.

[6] Estimated allocation, as between SD and sulfate turpentine consumption, of total apparent consumption of wood turpentine reported by Crop Reporting Board.

[7] Included under gum, if any.

Source: Reports of Crop Reporting Board, and Agricultural Stabilization and Conservation Service, USDA, and Bureau of the Census, U.S. Department of Commerce.

U.S. GOVERNMENT PRINTING OFFICE: 1965 O—790-831